U.S. ARMY-BAYLOR UNIVERSITY GRADUATE PROGRAM
IN HEALTH CARE ADMINISTRATION

UNCLAIMED PRESCRIPTIONS REQUISITIONED THROUGH PROVIDER ORDER ENTRY

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ABSTRACT

A total of 860 unclaimed prescriptions were evaluated from 656 patients during the period 21 Feb - 17 Mar 1997. Based on the interviews of 263 (40%) patients, a noncompliant patient will likely be female (61%), 29 years of age, and either an active duty soldier (42%) or a dependent of an active duty soldier (44%). One-sample Chi-square tests revealed significance for the reasons did not know a prescription had been ordered with (263) χ^2 (1) = 229.90, $p < .001$, had drug at home with (263) χ^2 (1) = 32.43, $p < .001$, and forgot the prescription with (263) χ^2 (1) = 57.98, $p < .001$. Also evaluated by means of the one-sample Chi-square test was the variable did providers tell patients where to pick up their prescriptions. The results indicated that providers frequently neglected to tell their patients with (263) χ^2 (1) = 1083.66, $p < .001$. The Emergency Department had a 17% rate of unclaimed prescriptions with significance at (263) χ^2 (1) = 28.68, $p < .001$ and OB/GYN had a 40% rate with signficance at (160) χ^2 (1) = 28.68, $p < .001$. Significance was also attained for the drug category/disease state of anti-inflammatories /analgesics/ antipyretics with (263) χ^2 (1) = 17.77, $p < .001$. A Chi-square test revealed significance in forgetfulness rates between patients >45 years old and patients $\leq$45 years old with (263) χ^2 (1) = 7.72, $p < .01$.

A $4.99 cost of dispensing each unclaimed prescription resulted in $4,291 of wasted resources; $62,654 if projected for the year.

Educating providers and patients and stressing provider/patient communication and interaction are keys to improving compliance. The pharmacy should implement a Discharge Medication Program that delivers prescriptions to the ward prior to a patient's discharge. Also, implementing a patient call system could potentially lower the current noncompliance rate at Darnall from 4.72% to 2.88%.

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INTRODUCTION

Darnall Army Community Hospital (DACH) is the largest Medical Activity within the Department of the Army. DACH supports 175 Texas counties, and within its 40-mile catchment area, there are more than 143,000 beneficiaries supported by a budget of approximately $142 million. Of this $142 million, $11.6 million is allocated to support the supply budget of the Pharmacy Service. Each day, approximately 3300 prescriptions are filled at the hospital's main outpatient pharmacy along with its five satellite pharmacies. Of these 3300 prescriptions, almost 1000 prescriptions are placed and filled during the weekday under provider order entry (POE) at the main outpatient pharmacy.

POE at Darnall is accomplished via the military's Composite Health Care System (CHCS). The CHCS is a comprehensive medical computer system that successfully integrates inpatient wards, clinical services, administrative departments, and outpatient clinics (Hubbell 1994). In January 1996, Darnall began POE that provided the first link between the hospital's providers and outpatient pharmacies. Of the five "bank teller" windows at its main pharmacy, two of them are

predominantly used for POE prescriptions.

Though POE has greatly reduced pharmacy wait times, the number of unclaimed prescriptions actually rose at one military pharmacy as compared with pre-POE (Craghead and Wartski 1989). Unclaimed prescriptions have continued to be a serious problem today at DACH. Being patient care is the first priority of any health care facility, finding ways to improve patient compliance is an important goal of the pharmacy. Increasing compliance will minimize those costs of dispensing (COD) that results in wasted resources to both the pharmacy and to the hospital. The primary benefit behind increasing compliance will be a healthier population served by the medical treatment facility (MTF). Conserved resources can then be used to better patient care in other clinical areas.

Conditions That Prompted the Study

Since POE began in Darnall's pharmacies, the rate of unclaimed prescriptions has been estimated at approximately thirty prescriptions per 1000 prescriptions filled or 3.0%. The process of receiving a prescription via POE is as follows:

1) the patient seeks medical care;
2) the provider orders prescription(s);
3) the prescription is filled at the pharmacy; and
4) the prescription is picked up.

Step number four relates to the unclaimed prescription. At DACH, all dispensed prescriptions are free to its beneficiaries. Also, the main

outpatient pharmacy is located in the same building where most of the patients have sought care. The decision not to claim a prescription appears more complicated than cost and convenience to the patient.

Unclaimed prescriptions results in wasted resources for the provider, the pharmacist, and for the organization as a whole. The provider has wasted his or her time by seeing a patient who does not comply with the prescribed treatment. The pharmacist's efforts are wasted since they fill the prescription, make it available for dispensing, remove unclaimed prescriptions after five days (at Darnall), verify the noncompliance against patients' records in the CHCS, log patients' noncompliance, and return unclaimed prescriptions to stock when possible. (When not possible to restock, the medicine is disposed of.) Later, the pharmacist may fill this exact prescription for the noncompliant patient when they return to the pharmacy after the original prescription has been returned to stock. The organization suffers as resources are wasted that could be spent in other areas of direct patient care. The patient suffers as there are potential increases in morbidity and mortality by their noncompliance.

Statement of the Problem

Although identifying the monetary amount of wasted resources is important and will be briefly examined, it is the intent of this paper to

review noncompliant patient records in the CHCS and telephonically contact a representative sample of patients. The reasons for this are twofold: 1) to describe a noncompliant patient by demographics, and 2) to discover those patients' specific reasons for noncompliance. By reviewing patient records, the CHCS can help identify unclaimed prescriptions by medicine and by clinic type.

Literature Review

Overview of the Composite Health Care System

In the mid-eighties, the CHCS was started at four Department of Defense (DOD) medical treatment facilities (Craghead and Wartski 1989). As of May 1994, some 200 DOD hospitals and clinics use the CHCS (Hubbell 1994). The CHCS has shown to be efficient and cost effective. In DOD hospitals with the CHCS, costs in 1992 increased 7% compared with 9% in DOD hospitals without the CHCS (Hubbell 1994). DOD pharmacies using the CHCS realize these cost savings in the use of pharmacy technicians and automated equipment for drug preparation. Pharmacists can then be better used in direct patient-care services.

The CHCS allows a provider to quickly and easily enter prescriptions and electronically transmit that prescription to the pharmacy. This process eliminates the need for the patient to carry a written prescription to the pharmacy. Due to access controls and an electronic

signing system, POE legally replaces the hard copy prescription. Since the prescription is received almost instantaneously at the pharmacy, it can be filled while the patient finishes at the clinic or while the patient makes their way to the pharmacy. POE has therefore significantly reduced wait times in the pharmacy. Another benefit of the CHCS is the integration of multiple outpatient pharmacies within a region. This capability allows the prescription to be routed to the correct pharmacy based on predefined parameters. Options also exist to reroute the prescription among pharmacies if the drug is unavailable at one or if the patient prefers to pick it up at another pharmacy within the network. The patient may also order refills at any of the pharmacies in the area. As new prescriptions are entered into the patient's prescription profile, the active profile is checked for possible drug warnings by the provider and the pharmacist.

Prescription Noncompliance

"Noncompliance relates only in terms of not bending to the will of another, in this instance the health care professional" (Moore 1995). Basically, there are two types of noncompliance that may lead to increased morbidity and mortality. The traditional type of noncompliance occurs if the patient fails to recognize the need to continue his or her therapeutic treatment regimen for the full intended course and stops taking the medication prematurely. Included in this category would be the

partial noncompliant patient who takes partial daily doses, e.g., a drug supposed to be taken three times a day is taken only twice daily. The second type, initial noncompliance, consists of two separate events: unpresented prescriptions and unclaimed prescriptions. Unpresented prescriptions are those that are never received in the pharmacy. POE eliminates unpresented prescriptions. The focus of this paper is on unclaimed prescriptions, those that either the patient or the patient's representative never retrieves.

Despite type, noncompliance incurs monetary costs, poor health, and even death. Monetary costs due to noncompliance have been valued in the U.S. at $100 billion per year (Donovan 1995). Approximately 125,000 Americans die each year because of noncompliance (McCaffrey 1993). Noncompliance may also cause between 5%-10% of all hospital admissions (McCaffrey 1993). A recent study at the Texas Southern University College of Pharmacy and Health Sciences showed that 19 of the 456 (4.2%) patients surveyed were admitted to the hospital or the emergency room as a *direct* result of their unclaimed prescriptions (Carlson 1997). Increased lengths of stay have been associated with noncompliance and 23% of admissions to nursing homes are said to be caused solely by patients' inability to manage their therapy adequately (Donovan 1995). Accordingly, one study reported that thirty-six of 315 (11.4%) elderly patients admitted to an acute care hospital was due to

noncompliance (Sclar 1991). The estimated total hospital expenditure for the thirty-six admissions was $77,289, or an average of $2,150 per event (Sclar 1991). Another study revealed that an overall hospitalization rate of 5.5% can be attributed to noncompliance (McNally et al. 1992). This percentage equals 1.94 million hospital admissions per year at a cost of $8.5 billion (McNally et al. 1992). According to the Inspector General of the U.S. Department of Health and Human Services, 32,000 people incur hip fractures each year because of drug-related falls and 163,000 suffer serious mental impairment due to prescription noncompliance (Price 1996). Additionally, inappropriate patient compliance in taking medicine leads to an estimated loss of twenty million workdays a year, representing about $1.5 billion in lost earnings (Business and Health 1991).

Noncompliance in taking prescribed medication is a serious problem for health care providers. Drug therapy is prescribed in no less than 70% of all physicians office visits (Coutts 1978). Accordingly, approximately 1.6 billion prescriptions are filled in the U.S. each year (Price 1996). However, only about 50% of patients follow directions closely enough to receive benefit (Price 1996). Other studies show that noncompliance by ambulatory patients ranges from 30% to as high as 85% (Coutts 1978). This fluctuation may be because valid and reliable data about the extent and type of noncompliance are difficult to obtain (Lowy 1990). This stems, in part, from the occasional practice of busy

physicians prescribing a medicine as a way of terminating the appointment, even if the prescribed drug is not really needed. While this action can mentally benefit the patient by providing reassurance of treatment, it does expose the patient to the unnecessary risk of prescription drugs. Another negative consequence of this practice is that it reinforces a false belief in the patient that there is a "pill for every ill" (Lowy 1990). This action will, therefore, also contribute to a patient's noncompliance and result in a waste of provider time and prescription medicine.

One author describes compliance as "the extent to which a person's behavior - in terms of taking medication, following diets, or executing lifestyle changes - coincides with medical or health advice" (Price 1996). Frequently today, patients are becoming participative in their own treatment regimen. Compliance, therefore, does not necessarily suggest that both professional and patient have developed a collaborative relationship (Moore 1995). A certain amount of noncompliance will result if the patient and provider do not have mutual trust or cannot agree on a course of treatment. Providers need to move away from their paternalistic attitudes. Moore believes that compliance is a dead-end street and if a patient's autonomy is to be respected, they must then be given enough information to become autonomous.

Unclaimed Prescriptions

A patient's autonomy is clearly exercised in those instances of unclaimed prescriptions. Unclaimed prescriptions can be defined "as prescriptions that are filled by a pharmacist but not obtained by the patient within a reasonable amount of time" (Kirking and Kirking 1993). For purposes of this paper, "noncompliant" will refer to an unclaimed prescription. While there has been much research concerning prescription noncompliance, relatively little research has occurred in the area of unclaimed prescriptions. (As previously discussed, "unclaimed prescriptions" is actually a subset or form of overall noncompliance.) Perhaps by identifying the noncompliant patient and clinic or provider, the hospital may be better positioned to educate its patients/providers and foster communication between its providers and patients. By examining types of medicines that go unclaimed and interviewing patients, reasons for unclaimed prescriptions may be discovered that could lead to their reduction and possible elimination.

Historically, unclaimed prescriptions have been viewed as a nuisance, or in the retail world, as a loss of sales. This loss of sales represents more than $1 billion annually (Schering Labs 1996). They also pose a risk management problem to the pharmacy when medicines

are returned to stock. Those medicines that cannot safely and surely be returned to stock must be destroyed. Undoubtedly, unclaimed prescriptions may also contribute to a patient's worsened condition. It is reported that half of all unclaimed prescriptions are for refills, authorized by physicians who believe their patients really need the medications (Schering Labs 1996). The pharmacist can play an integral role in the patient's compliance and care as pharmacy practice moves from product-based to patient-based services.

Most of the literature regarding unclaimed prescriptions has been limited to a single institution. In 1989, Craghead & Wartski reported on unclaimed prescriptions at Ireland Army Community Hospital (IACH). Recorded noncompliance rose from 1.2 prescriptions per 1000 prescriptions filled before implementation of the CHCS to 18.4 per 1000 prescriptions filled after implementation. (Noncompliance was defined as medication therapy prescribed on an outpatient basis and not claimed by the patient within five days.) Part of this rise was attributed to the lack of information available before the CHCS. Specifically, before the CHCS, the number of prescriptions given to patients but not presented at the pharmacy was unknown. Since the CHCS records all POE prescriptions, this information is now captured. Whatever the reasons were for not claiming prescriptions, the authors implied that a physician's communication skills do have an impact on compliance (Craghead and

Wartski 1989). They also mentioned the resources wasted generating unclaimed prescriptions will never be fully quantified. Recently, a Master's Report was written that examined the components necessary to determine the final monetary value of a prescription. These three components included the drug ingredient cost, the cost of dispensing (COD), and the net profit (Russie 1996). Since the military pharmacy system is not concerned with net profit, only the COD and the ingredient cost were examined in depth. As one measurement, this study will use only the COD found using the formula from Russie's paper. As the ingredient cost is recouped when unclaimed prescriptions are returned to stock, the COD represents wasted resources used to prepare and verify unclaimed prescriptions.

The COD number is composed of many costs that include personnel salaries, container costs, rent, and utilities. Though the COD is critical for comparing pharmacies, little has been published about COD since 1990 (Russie 1996). In 1984, Berger and Pearson found the break-even COD to be $3.04 per prescription filled in a civilian setting. In 1996, Russie found the COD to be $2.95 in a large military facility's pharmacy. Darnall's COD at its main outpatient pharmacy is $4.99.

"With the transition from fee-for-service medical service to managed care systems, compliance with prescription medication gains an increased importance in reducing costly outcomes such as

hospitalizations or more expensive alternate therapies" (Craghead and Wartski 1991). As Darnall begins its second year of TRICARE, the military's managed care program, a truer statement cannot be made. The patient becomes more important in controlling costs as prescription therapy will not work if the patient does not initiate the prescribed medication regimen. Previously, it was stated that the unclaimed prescription rate was 18.4 per 1000 prescriptions filled under the CHCS at an Army hospital (Craghead and Wartski 1989). In 1991, Craghead & Wartski reported the unclaimed prescription rate to be 16.5 per 1000 prescriptions filled and this rate is *only* slightly more than half that of Darnall's estimated 30.0 per 1000 prescriptions filled. Craghead and Wartski's 1991 study also reported on unclaimed prescriptions per clinic and within general drug categories. The rates of unclaimed prescriptions ranged from 8.1% for the emergency room to 21.4% for OB/GYN. Interestingly, one might expect a patient in the emergency room to be in a worse condition than a routine clinic outpatient and therefore feel a greater sense of urgency in taking the prescribed medication. One study reported that 20% of patients discharged from the emergency department (ED) can be expected to be noncompliant (Saunders 1987). Regarding drug category, Craghead and Wartski reported the rates for unclaimed prescriptions to range from 2.0% for cardiacs to 17.5% for anti-inflammatories. Antibiotics accounted for 9.2% of all unclaimed

prescriptions. Kirking and Kirking reported anti-infectives as the most frequently unclaimed along with Farmer and Gumbhir. Similar to the emergency room scenario, one would expect antibiotics to be lower on the lists as many of these antibiotics may have been for infections that could have worsened without prompt therapy. Craghead and Wartski stated that more research is needed to include a telephonic survey of patients to categorize reasons for not claiming prescriptions. The following table summarizes typical compliance rates for various medicines.

TABLE 1

Noncompliance is High for All Kinds of Medicines

Treatment		***Compliance rate%***
Penicillin prophylaxis for rheumatic fever		33
Antipsychotics in schizophrenics		42
Tuberculosis medications		55
Various medications used by the elderly		41
Various medications for diabetes or congestive heart failure		42
Antihypertensives	1 year	94
	2 year	65
	3 years	34

Source: Morris LM and RM Schulz. Patient Compliance - An Overview. Journal of Clinical Pharmacy and Therapeutics. 17:283-295, 1992.

In a 1993 study by Kirking and Kirking, patient characteristics were identified with regard to unclaimed prescriptions. They looked at the patient variables of gender, age, and number of prescriptions per patient compared with all unclaimed prescriptions, prescriptions eventually dispensed, and prescriptions never dispensed. Few relationships were found. They did discover, however, that retention of unclaimed prescriptions for a longer period should help decrease the duplication of refilling prescriptions. This would also help eliminate the possibility of error when medications are returned to stock. The Kirking & Kirking study returned unclaimed prescriptions to stock after 7-13 days of being on the shelf. Farmer & Gumbhir decided prepared prescriptions not claimed by the patient for at least thirty days were designated unclaimed. McCaffrey et al. defined unclaimed prescriptions as those not picked up within seven days of receipt in the pharmacy. DACH and IACH both return unclaimed prescriptions to stock after five days because of space limitations due to prescription volume.

Previous reports state that almost nine in every thousand prescriptions filled goes unclaimed (Farmer and Gumbhir 1992). This agrees with overall estimates showing the range to be between 0.5% and 3.0% (Farmer and Gumbhir 1992). More recently, that figure was reported to be 2.0% (Schering Labs 1996). Based on Schering's report that estimate that two billion prescriptions are written each year, 2%

translates into approximately forty million unclaimed prescriptions. The Schering Report also found that 20% of the interviewed patients said they had to visit the doctor again to get a new prescription to replace the one they failed to pick up. This represents approximately $200 million or more in wasted resources due to needless duplication of efforts.

Regarding prescription noncompliance, most studies have shown no consistent relationship between compliance and age, sex, or educational level (Bazargan et al. 1993). However, Schering Report XVIII found relationships to be real and significant of the "no-show" patient compared with other patients who had claimed their prescriptions. Several characteristics of the typical no-show compared with the general population are summarized below.

Table 2

Characteristics of the Typical

No-show	v	General Population
38 years old		44 years old
50% < 35 years old		33% < 35 years old
more likely to be female		less likely to be female
more likely to be single		less likely to be single
13% are retired		20% are retired
58% are homeowners		67% are homeowners
36% are non-white		19% are non-white

Source: *Schering Report XVIII:* The Phantom Patient and Community Pharmacy Practice 1996.

Also, more women than men left new prescriptions unclaimed.

Overall, 75% of the no-shows are between eighteen and forty-four years of age. Yet, it is this age group that have rates two to three times higher than older adults for influenza, the common cold, migraine headache, and infectious diseases. Therefore, most of their unclaimed prescriptions were for respiratory, allergy, and gynecological problems.

Pharmacists were asked to identify reasons they believe patients fail to pick up their prescriptions. Of all respondents, 63% thought cost was the predominant reason (McCaffrey et al. 1993). When patients were asked, only 31% reported cost as a factor (Schering Labs 1996). In another patient interview, financial concerns accounted for only twelve of the 223 (5.4%) unclaimed prescriptions (Kirking et al. 1995). Reported differences in cost as the reason for noncompliance are shown for information only as pharmacy customers in the Military Healthcare Service System (MHSS) are not charged for their prescriptions. The emphasis here is that the literature shows differences exist between studies.

Other reasons for patients not claiming prescriptions (as perceived by pharmacists) include forgetfulness, condition improved, medicine was unwanted, lack of communication, disagreement with physician, apathy, and different medication expectations (McCaffrey et al. 1993). A recent study showed that one reason 5.7% of surveyed patients did not pick up their prescriptions was because they did not know about

them (Hamilton and Hopkins 1997). The authors believe the chance for an unclaimed prescription increases when a patient is removed from the prescription-transmittal process. Other patient responses included recovered from condition (39%), forgot the prescription (38%), had the same or similar medicine at home (35%), felt they did not need the medicine any more (34%), and said they did not like to take medicine (32%)(Schering Labs 1996). Forgetfulness is the primary reason in both reports. However, since the typical no-show is young, the reason of forgetfulness may be semi-purposeful. Since so many of the eighteen to forty-four-year age group are well-endowed with health, they see little reason in conserving it. Therefore, one can assume that they were not interested in picking up the prescription in the first place. While older people are often regarded as forgetful, younger people forget to pick up their prescriptions 80% more frequently than senior citizens (Schering Labs 1996).

Purpose

One purpose of this project was to profile the noncompliant patient in a military MTF by examining noncompliant patient records in the CHCS. Previous studies have indicated that the typical noncompliant patient cannot be differentiated among those persons not claiming their

prescriptions. This study identifies noncompliant patients by gender, age, classification of military status, and military rank.

The second purpose of this project was to identify patients' reasons for not claiming prescriptions. This study showed that reasons clearly exist for not claiming prescriptions in a military pharmacy. Patients with unclaimed prescriptions were telephonically interviewed to learn reasons for noncompliance.

A third purpose of this project was to relate unclaimed prescriptions to categories of drugs and clinic type. The results of this paper showed that one (or more) drug category was left unclaimed more often than the others and one (or more) clinic type was responsible for noncompliance than the others.

The fourth and final purpose of this study was to discover solutions to improve patient compliance. This was accomplished by analyzing patients' reasons for noncompliance and by analyzing those clinics with the most unclaimed prescriptions.

Several hypotheses were tested in this study: (1) there are no differences in forgetfulness rates among two age groups; (2) that providers tell their patients where to pick up their prescriptions at a 98% rate; (3) that 38% of the patients will claim forgetfulness as a reason for noncompliance; (4) that 35% of the patients will claim "had drug at home" as a reason for noncompliance; (5) that 5.7% of the patients did not know

that a prescription had been ordered; (6) that 21.4% of the patients seen in the OB/GYN clinic failed to claim their prescriptions; (7) that 8.1% of the patients seen in the Emergency Department failed to claim their prescriptions; (8) that patients failed to claim anti-inflammatories/ analgesics/antipyretics at a 17.5% rate; (9) that patients failed to claim antibiotics at a 9.2% rate; (10) that patients failed to claim hypertension/ heart disease medications at a 2% rate.

CHAPTER 2

METHOD AND PROCEDURES

Study Site

Darnall Army Community Hospital's pharmacy network fills prescriptions for approximately 143,000 beneficiaries within its catchment area. Darnall, the Army's largest medical department activity (MEDDAC), is located at Ft. Hood, TX, the Army's and the DOD's largest military installation. Darnall's pharmacy fills approximately 3300 prescriptions each day. One thousand of these prescriptions are filled under provider order entry (POE) at the main outpatient pharmacy each day. Unclaimed prescriptions are returned to stock five days after they are filled.

Study Sample

All unclaimed new prescriptions filled under POE from 21 Feb - 17 Mar 1997 were examined at the main outpatient pharmacy. New prescriptions are those that had not been previously entered into the

pharmacy's Composite Health Care System (CHCS). "New prescriptions" does not necessarily mean the medication had not previously been used by the patient. Patients who had unclaimed prescriptions from 21 Feb - 17 Mar 1997 comprised the telephone survey sample. Three attempts were made to contact the noncompliant patient at various times throughout the workday and weekends.

Data Collection

Pharmacy records.

The CHCS was examined for noncompliant patients (unclaimed prescriptions) to obtain patients' names; drug names; clinic; gender; age; patient classification (active duty, dependents of active duty, retirees, dependents of retirees, other); and rank.

Based on previous articles and slightly modified for use at DACH, the following categories were used to group unclaimed prescriptions. The ten drug categories of anti-inflammatories/analgesics/antipyretics, antibiotics, asthma, diabetes, prenatal/postnatal/oral contraceptives, gastrointestinal agents, hypertension/heart disease, topicals, and other drugs were used to evaluate which categories were left unclaimed the most.

Patient interviews.

Patients that were designated noncompliant based on unclaimed prescriptions (under POE) from 21 Feb - 17 Mar 1997 were interviewed by phone at home or at work over over a six-week period. A pilot study was initially conducted to determine the number, appropriateness, and the order of the questions. Two interviewers were used who rehearsed the questions and who checked each other during the pilot study to ensure the study's inter-rater reliability. Patients were asked if they were aware they had prescriptions that had not been picked up, why they visited their provider that resulted in a prescription, if their provider told them where to pick up the prescription, if their provider told them their prescription was available for pickup only for five days, and reasons for not picking up their prescription(s). Patients were informed that their responses were completely voluntary and would remain anonymous. All questions were worded to enable either a "yes" or a "no" response from the patient for simplicity except for "other" reasons.

Data Analysis

Data gathered from patient interviews and the CHCS regarding patient characteristics were entered into a personal computer using the

Statistical Package for Social Sciences (SPSS) for analysis. The dichotomous independent variables of reasons for not claiming prescriptions were coded one for a "yes" response and zero for a "no" response. The other variables were also coded one for the "presence" of an attribute or zero for the "absence" of the attribute. The predetermined list of reasons included: did you forget to pick up the prescription, were you afraid to take the medicine or did not think it would work, already had some of the drug at home, felt the medication was inconvenient to use, felt the wait in the pharmacy was too long, did not know a prescription had been ordered, or other. If "other reason" was selected, this variable was coded a one and the specific reason was recorded and tabulated. A Chi-square statistical test was conducted to determine significance between a binary dependent and a binary independent variable. Significance was set at .05. A one-sample Chi-square test was used to test null hypotheses about the distribution of values of single nominal variables. Expected values were entered into the SPSS program based on previously reported findings. Significance was again set at .05. Variables used in this study with their sample sizes, averages, standard deviations, and frequencies are presented in table 3.

The COD value of $4.99 derived from Russie's formula was multiplied by each unclaimed prescription for the period examined to arrive at an amount of wasted resources if unclaimed prescriptions were

eliminated. This COD includes all the time required to: fill a prescription and place it on the shelf; pull unclaimed prescriptions from the shelf; verify unclaimed prescriptions against the patient record in the CHCS; log unclaimed prescriptions in the CHCS; and return unclaimed prescriptions to stock. The cost of dispensing was multiplied by the average number of unclaimed prescriptions per day and then by 365 to arrive at a yearly monetary figure that represents wasted resources.

CHAPTER 3

FINDINGS AND UTILITY OF RESULTS

During the data collection period (DCP) 18,233 prescriptions were filled under POE. This was an average of 730 each day the pharmacy is open. Of the 18,233 prescriptions, 1,009 prescriptions were entered into the CHCS as noncompliant (unclaimed). While 1,009 prescriptions were recorded as unclaimed, 149 had actually been picked up after the five days, but prior to the study, resulting in 860 unclaimed prescriptions examined during the DCP. This corresponds to an average of 34.4 unclaimed prescriptions per day (860/25 days) or a rate of forty-seven per 1000 (860/18,233) prescriptions filled (4.72%). The actual rate of 4.72% found during the DCP is higher than the Pharmacy Service's estimate of 3.0% and to other reported rates. More than 1,000 phone calls were made attempting to reach 656 people with 860 unclaimed prescriptions. These attempts resulted in 263 completed patient questionnaires (with n= 103 male and n=160 female patients) for a 40% success rate. Disconnected phones, people had moved, and three unsuccessful attempts were the primary reasons for not contacting people. Two people

refused to participate in the study.

Patients surveyed were allowed to give more than one reason for not claiming their prescription(s). Many of the persons interviewed (n=174) were not aware that they had an unclaimed prescription(s) (66%). Also, 27% (n=72) had no idea that a prescription had even been ordered for them and 30% (n=80) claim they were never told where to pick up the prescription. Adding to the problem of unclaimed prescriptions was the fact that 81% (n=212) of those people interviewed were not aware of the pharmacy's policy to maintain POE prescriptions on its shelves for five days.

One purpose of this study was to profile the noncompliant patient. In this study, the noncompliant patient will likely be female (61%), twenty-nine years of age, and either an active duty soldier (42%) or a dependent of an active duty soldier (44%). Of those interviewed, almost 38% were active duty soldiers. Also, approximately 76% of the surveyed patients with unclaimed prescriptions fell between the ages of eleven and forty-six. This corresponds closely to those numbers found in Schering Report XVIII (75% of the no-shows fell between the ages of eighteen and forty-four years of age).

The second purpose of this study was to identify persons' reasons for not claiming their prescriptions. The category "other" received 37% of the responses. These reasons and their frequencies are

listed in the following table.

Table 3
Other Reasons for Unclaimed Prescriptions

Reason	Frequency
Felt they didn't need it	18
Not in bag with other prescriptions	11
Expected a written prescription	8
No time to pick up prescription	7
Patient went out of town	6
Pharmacy was closing or closed	5
Told provider the prescription made them sick	4
Getting prepped for surgery	2
Second provider said to not take the prescription	2
Pharmacy did not carry particular particular medicine	2
Patient did not have ID card	2
Patient had no transportation to DACH pharmacy	2
Duplicate order	2
Quantity mistake on pharmacy's part	2
Original prescription substituted by pharmacy	2
Provider prescribed medicine for wrong reasons	1
Daughter could not wait for mother to get prescription	1
Neglected to pick it up	1
Rudeness of pharmacist	1
Small qty. was not worth effort	1
Understood prescription to be ordered later	1
Prescription was picked up at Killeen FCC's pharmacy	1
Thought prescription was available anytime	1
Provider changed mind about prescription	1
Prescription was ordered after patient left DACH	1
Given to patient by pharmacist after hours	1
Two separate providers ordered same prescription	1
Received prescription direct from another clinic	1
Patient had another form of Tylenol at home	1
Felt prescription might interfere with job performance	1
Did not like medication's side effects	1
Pt. had access to presc. at own battalion aid station	1
Patient picks up all medications at end-of-month	1
Presc. was not available for pickup when pt. showed up	1
Inconvient to go to main DACH pharmacy	1
Pediatrics pharmacy closed - sent to main pharmacy	1
Did not know where pharmacy was located	1
Pharmacy was out of the particular prescription	1
Total	98

Of the 38 "other" reasons people gave for not claiming their prescriptions, seven were more frequently stated than the others. These

seven, along with their frequencies, were because the patient felt they didn't need it (18), the unclaimed prescription was not in the bag with the other prescriptions (11), the patient expected a written prescription (8), the patient had no time to pick up the prescription (7), the patient went out of town (6), the pharmacy was closed or was closing (5), and the patient told the provider the prescription would make them sick (4). From the predetermined list of reasons, the top four were did not know a prescription had been ordered (72), had some of the medicine at home (48), forgot the prescription (40), and the wait in the pharmacy was too long (29). Interestingly, the reasons of "no time to pick up prescriptions," "the patient went out of town," and "the wait in the pharmacy was too long" seemingly contradicts one purpose behind POE prescriptions, i.e., to save the patient time. Also, priority service is given to those patients with POE prescriptions. By examining the computer record from the CHCS, the average wait time for POE prescriptions was found to be 10.6 minutes during the study period. This average wait time seems to indicate that "no time" is not a primary reason for not claiming prescriptions.

A review of the literature indicated 38% of the noncompliant persons claimed forgetfulness as a reason. Based on the average age of a little more than twenty-eight in this study compared with the national average age of thirty-eight, the forgetfulness in this study may also be semi-purposeful as speculated in Schering Report XVIII. Since many of

this age group are so well-endowed with health, they may see little reason in conserving it.

Identification of clinics/departments representing unclaimed prescriptions and type of medicines most often left unclaimed was the third purpose of this study. The top five unclaimed prescriptions according to drug/disease state categories were for anti-inflammatories/ analgesics/antipyretics (27.4%), pre&postnatal/oral contraceptives (17.9%), topicals (10.6%), cough & cold remedies (9.9%), and for gastrointestinal agents (9.9%).

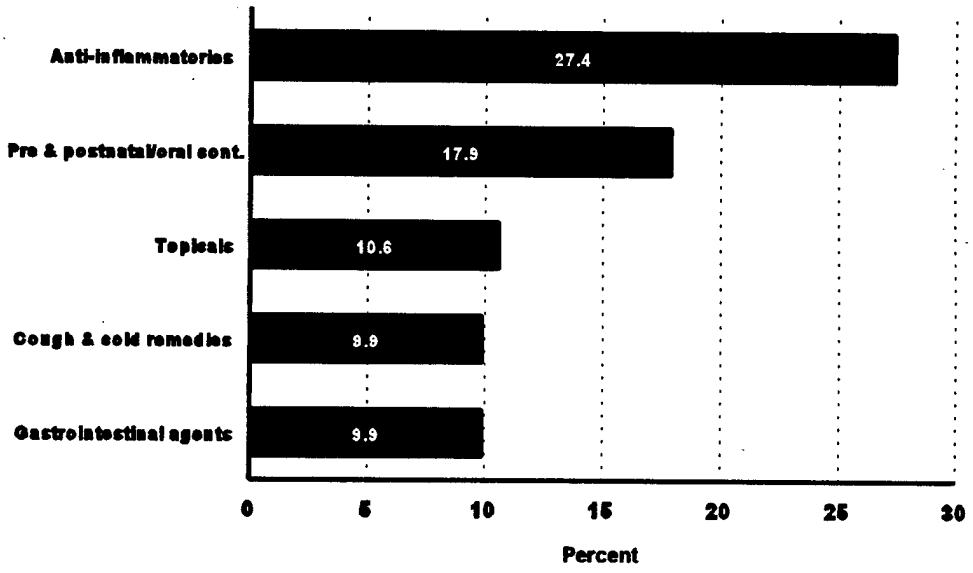


Fig. 1. The top five unclaimed prescriptions by drug/disease category.

The top five clinics/departments having unclaimed prescriptions were OB/GYN (24.3%), the emergency department (17.1%), the department of medicine (16.3%), the troop medical clinics (12.9%), and

the ambulatory clinics (12.5%). (One patient had one each unclaimed prescription from two different clinics.)

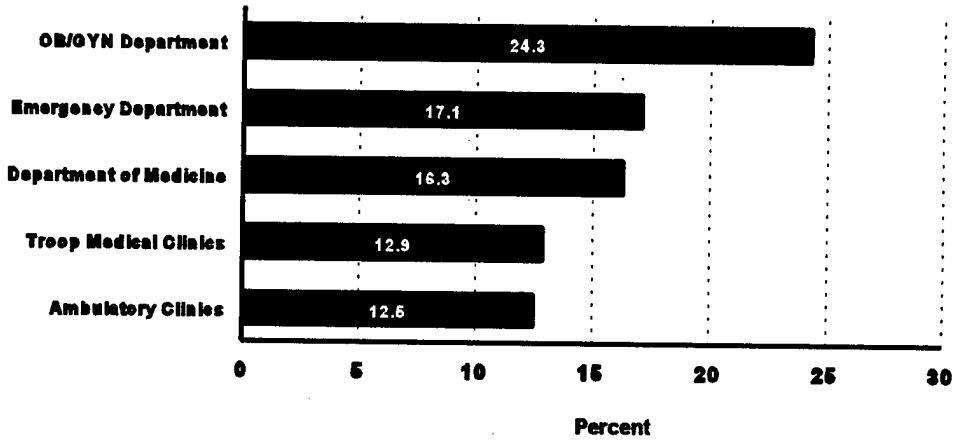


Fig. 2. The top five unclaimed prescriptions by clinic/department.

Many pre&postnatal prescriptions were for oral contraceptives, condoms, vaginal foam, and vitamins prescribed following the birth of a child. At Darnall, births average eight per day. This prescription type is usually given at discharge for those mothers who have had babies. Since there are many steps to a discharge at DACH, it may be too much to expect patients to remember their prescriptions prior to going home. Perhaps an unstated reason in the number of unclaimed topicals and cough & cold remedies could be that people were not prescribed what they thought they needed and therefore left those prescriptions unclaimed.

Patients were surveyed from a population who had unclaimed

prescriptions. Two age groups were examined; one group was >45 years old and the other group was ≤45 years old. On the average, all 263 patients had a 15% forgetfulness rate. On a group basis, the >45 rate was 0% and the ≤45 rate was 18%. A χ^2 test revealed a statistically significant difference in rates with (263) χ^2 (1) = 7.72, $p < .01$ (see Table 5 and Fig. 3). These results could only be expected 1 time out of 100 due to chance alone, 15 times out of 100 an expected difference of 18% is systematic and real. The Pearson's r correlation of -.1714 between these two variables indicates an inverse relationship (see Fig. 4), that patients tend to forget their prescriptions less as they increase in age. Based on the Chi-square results, we would reject the null hypothesis and accept the alternate that there is a difference in forgetfulness rates between these two age groups.

The remaining nine hypotheses in this study are all one-sample Chi-square tests. Two options exist in the expected values portion of this test, all categories equal and specified values. These hypotheses all used the specified values option. The specified values were taken from previously reported findings in the civilian sector or at Ireland Army Community Hospital or based on assumptions by the researcher prior to data collection.

One expectation of a patient receiving a prescription might be that he or she would be told where to pick up that prescription. The second

hypothesis tested the assumption that providers tell their patients where to pick up their prescriptions at a 98% rate; that only two patients out of 100, or 2%, might not be told. From Table 6, one can see that we would expect 258 out of 263 patients surveyed to respond that they were told where to pick up their prescription. Cells with expected values greater than five were used to compute the χ^2 statistic. A χ^2 test revealed a statistically significant difference in rates with (263) χ^2 (1) = 1083.66, $p <$ .001. Fully 30% of the respondents said that they were not told. This statistical test allows the null hypothesis to be rejected and the alternate hypothesis to be accepted, that providers are not informing their patients where to pick up their prescriptions at a 98% rate.

Hypotheses 3-10 base their expected values on previously reported findings. Table 7 shows that we could expect 100 (38%) patients in our sample to claim forgetfulness as a reason for not claiming their prescription. A χ^2 test revealed a statistically significant difference with (263) χ^2 (1) = 57.98, $p < .001$. Only 40 (15%) patients claimed forgetfulness. The null hypothesis is rejected and the alternate hypothesis is accepted. Forgetfulness is not a statistically signficant reason for not claiming a prescription. Table 8 shows that we could expect 92 (35%) patients to claim they had the drug at home as a reason for not claiming their prescription. A χ^2 test revealed statistical significance with (263) χ^2 (1) = 32.43, $p < .001$. Again, we would reject the

null hypothesis and accept the alternate hypothesis as 48 (18%) patients claimed drug at home as a reason. Here, cost may have been an additional factor to this reason's low rate, as prescriptions at DACH are free. There was no cost to the patient for not claiming their prescription and drug at home may have been a convenient reason. The literature shows that 5.7% of surveyed patients did not know that a prescription had been ordered for them. At DACH, 27% of the surveyed patients claimed they did not know. These results were considered significant with (263) χ^2 (1) = 229.90, $p < .001$ (see Table 9). The null hypothesis was rejected and the alternate hypothesis was accepted.

Hypotheses 6-10 are based on previous findings from Ireland Army Community Hospital (IACH). IACH previously reported that 21.4% and 8.1% of the clinics with unclaimed prescriptions belonged to OB/GYN and the Emergency Department, respectively. Figure 5 graphically depicts these differences in observed and expected values. We could expect 34 patients as compared to the surveyed 64 (40%) patients reporting unclaimed prescriptions for the OB/GYN Department. The χ^2 results were considered significant with (160) χ^2 (1) = 32.91, $p < .001$ as shown in Table 10. The null hypothesis was rejected and the alternate hypothesis was accepted. In the Emergency Department, 21 patients were expected to have unclaimed prescriptions as compared to our observed 45 (17%). These results, as shown in Table 11, were

considered significant with (263) χ^2 (1) = 28.68, $p < .001$. The null hypothesis was rejected and the alternate hypothesis was accepted.

Three drug categories/disease states were compared to the IACH findings. Figure 6 displays these observed and expected values. Table 12 shows we could expect 46 (17.5%) patients in our survey to not claim anti-inflammatories/analgesics/antipyretics. We actually had 72 (27%) observed cases. These results were considered significant with (263) χ^2 (1) = 17.77, $p < .001$. The null hypothesis was rejected and the alternate hypothesis was accepted. Tables 13 and 14 show the results of the unclaimed rate for antibiotics and hypertension/ heart disease. Our expected cases were 24 (9.2%) and 5 (2%), respectively. Both were considered insignificant at the .05 level as our surveyed patients reported a 6.1% rate for antibiotics and a 3.4% rate for hypertension/heart disease. Therefore the null hypotheses were accepted in both instances.

During the DCP 860 prescriptions went unclaimed. Previously, the COD per prescription was determined to be $4.99. Based on Russie's formula, the COD for the unclaimed prescriptions can be extrapolated and computed to be approximately $4,291.40 (860 x $4.99) for this period (25 days). Since the pharmacy is open every day, projecting this amount throughout the year would result in a needless expenditure of approximately $62,654.44 (34.4 unclaimed prescriptions/day x 365 x $4.99). The resulting savings, from eliminating unclaimed prescriptions,

could potentially be used to fund additional full time equivalents (FTE) (within the Pharmacy Service) among other alternatives.

It can be assumed there are other Army MEDDACS using POE and the CHCS who are encountering similar problems with unclaimed prescriptions. It can also be assumed that the Navy's and the Air Force's health care facilities are also experiencing the same problems with unclaimed prescriptions. Reliability of this study was considered significant as POE via the CHCS would be the same throughout the DOD and therefore these results should be easily replicated. Also, the groups of persons studied, clinics, providers, and formularies would be fairly consistent throughout each of the respective Services. The original questions were sampled and culled through telephone interviews and seem representative whether asked of patients in Texas, Alaska, or wherever. Face or content validity is considered significant based on the study design, literature review, and expert opinions of several employees within the Pharmacy Service. External validity is considered significant as a similar study was conducted at an Army MEDDAC (minus the telephonic survey) and other studies involving unclaimed prescriptions in the retail setting revealed similar results.

Discussion

A telephonic notification system should be used to call patients at home to remind them to pick up their prescriptions. While less when compared to other results, the rate of forgetfulness in patients less than 45 years old is significant. This age group would benefit more than those older than 45 from a patient notification system. Such a proposed system should target the younger age group. A previous study reported that only 25 of 70 (35.7%) patients contacted by phone picked up their prescriptions (Hamilton and Hopkins 1997). That study's sample size of 70 may be too restrictive to project only a 35.7% success rate. However, applying the figure to this study would result in an additional 234 patients complying with their prescription regiment (35.7% x 656 patients). Also, this could have resulted in a savings of $1,669.75 (234 patients x 1.43 avg. prescriptions/patient x $4.99 COD). DACH could expect a higher success rate from its population if it implemented a telephone notification system due to its military structure.

DACH's rate of 40% versus IACH's rate of 21.4% for unclaimed prescriptions originating from OB/GYN is significant. This becomes more important since Darnall averages more births per day (8) than any other DOD MTF. The pharmacy should, therefore, implement a Discharge Medication Program that delivers prescriptions to the patient on the ward

prior to discharge. This would benefit the patient whose schedule on discharge day is already hectic. MTF's would benefit as their noncompliance rate would drop and resources would be conserved.

Education and communication are the main solutions to reducing or eliminating unclaimed prescriptions. This is evidenced by the high reported rates by patients of not being told where to pick up their prescriptions and patients not knowing that a prescription had even been ordered for them. All of the clinical departments need to improve the communication process between their providers and patients. A concerted effort must be made to inform each patient of the POE process in an era of diminishing resources and the importance of their prescription compliance. A lack of patient involvement in the prescription-transmittal process most likely contributes to a lower rate of patients' claiming their prescriptions. (Walter Reed Army Medical Center discovered a 13% drop in unclaimed antibiotic prescriptions when physicians were told to emphasize to patients when prescriptions were being written (Carlson 1997).) Since 55% of the unclaimed prescriptions were for an acute purpose and 18 patients felt they did not need the prescription, providers should query their patients if they agree with what has been prescribed for them. This should help remove some of the paternalistic approaches to practicing medicine and more directly involve patients in their own care.

While the patient receives the prescriptions free of charge, there is a cost to the hospital and to society that cannot be overlooked. Improving the communication process should improve compliance and help lower the amount of wasted resources. Providers should also query their patients if they already have plenty of the medicine at home and not order prescriptions until their patients need them. The practice of ordering a prescription so "it will be there when you need it" is not appropriate.

As reported in the January 1997 edition of The Mercury, the MEDDAC at Ft. Drum, NY developed a 25-minute video to explain pharmacy services to its customers. While a 25-minute video may be too lengthy, a similar endeavor could be done at the MEDDAC at Ft. Hood. Almost 81% of the people interviewed were not told about the pharmacy's five day policy of maintaining POE prescriptions on its shelves. A short video shown in the clinics or a brief infomercial on the post cable channel could be an effective method to educate customers on pharmacy procedures, the risks of noncompliance, and to inform them of the costs involved of not claiming prescriptions. Radio announcements in combination with newspaper articles could also be beneficial in describing the costs of unclaimed prescriptions to DACH and the potential of lower health status to patients who leave prescriptions unclaimed.

Perhaps the pharmacy could look at increasing the space where

POE prescriptions await pick up and therefore hold prescriptions longer than the five days. This solution may only exacerbate Darnall's current space limitations. However, the literature shows the number of unclaimed prescriptions drops as prescriptions are held longer.

Despite the benefit of "paperless" prescriptions, many patients prefer having something in their hand to remind them to pick up their prescription. Perhaps some sort of "voucher" system could be devised. The capability currently exists within the CHCS for the provider to give the patient a Patient Order Sheet for presentation at the pharmacy. This, or something similar, could be implemented.

A few patients thought the pharmacy should have extended hours since it was closed or closing when they tried to claim their prescriptions. The Pharmacy Service is currently open from 0800-2000 hours Monday through Friday and 0800-1700 hours on Saturdays and Sundays. The 86 hours that the pharmacy is open weekly should be more than adequate. Educating providers/patients and emphasizing provider/patient communications would be more beneficial than merely extending pharmacy hours.

One limitation of this study could have been the time of year when it was conducted. No adjustments were made for seasonality. The DCP also covered a period when many soldiers were at the National Training Center (NTC) in Fort Irwin, CA. The first week of data collection

coincided with the local schools' spring break. In both instances, although up to three attempts were made to contact these persons, several more days elapsed which could have contributed to possible inaccurate responses. The sample of convenience for this DCP, however, is considered representative of the Pharmacy Service's customers.

The beneficiaries eligible to use the pharmacy must be responsible enough to discuss their prescription treatment with their providers. Providers must be held accountable to inform their patients that a prescription has been ordered for them. The discovered rate of unclaimed prescriptions at DACH is 47.2 per 1000 prescriptions filled or 4.72%. Expectedly, this rate could drop to 2.88% if the telephonic notification system were implemented (35.7% x 656 patients x 1.43 avg. prescriptions per patient = 335 prescriptions subtracted from 860 prescriptions = 525 unclaimed prescriptions/18,233 prescriptions). Prescriptions claimed through implementation of a Discharge Medication Program for maternity patients could further lower the noncompliance rate.

While elimination of all unclaimed prescriptions is desirable, it is not very probable. However, any reduction in unclaimed prescriptions is meaningful and directly relates to an increased health status in the served population. Also, by reducing the rate of noncompliance, limited

resources are conserved. Some costs can be quantified, but other costs to the facility, such as increased lengths of stay, expanded procedures or treatments, and repeated clinic visits cannot. This study could not determine the impact of noncompliant behavior on a patient's health, but a negative outcome should be expected. The importance between provider and patient communication and interaction in the prescription process cannot be overstated.

TABLE 4

MEANS, STANDARD DEVIATIONS, AND PERCENTS,
OF PERSONS WITH UNCLAIMED PRESCRIPTIONS

Variable	Mean	S.D.	n	Percent
No. of unclaimed scripts	1.43	0.93	376	
Gender				
Male			103	39
Female			160	61
Total			263	100.0
Age	28.43	16.369	263	
Status				
Active duty			109	41.5
Dependent of active duty			115	43.7
Retiree			12	4.6
Dependent of retiree			24	9.1
Other			3	1.1
Total			263	100.0
Rank				
E1-E4			66	25.1
E5-E6			17	6.5
E7-E9			16	6.1
O1-O3			3	1.1
O4 -O6			5	1.9
O7-O9			0	0.0
WO1-WO5			3	1.1
No rank			153	58.2
Total			263	100.0
Drug/Disease State Category*				
Anti-inflammatories/anangesics/antipyretics			72	27.4
Pre&Postnatal/Oral contraceptives			47	17.9
Antibiotics			16	6.1
Cough & Cold remedies			26	9.9
Hypertension/Heart Disease			9	3.4
Gastrointestinal agents			26	9.9
Asthma			4	1.4
Diabetes control			2	.8
Topicals			28	10.6
Other			85	32.3
Total			315	119.7
Clinic/Department**				
Dental clinic			13	4.9
Psychiatry			8	3.0
Pediatrics			11	4.2
Ambulatory clinics			33	12.5
Emergency department			45	17.1
OB/GYN clinic			64	40.0
Medicine department			43	16.3
Surgical department			13	4.9
Troop medical clinic (TMC)			34	12.9
Total			264	116.8
Aware That Script Had Not Been Claimed				
Yes			89	33.8
No			174	66.2
Total			263	100.0
Purpose Of Visit				
Acute condition			144	54.8
Chronic condition			78	29.6
Routine visit (e.g. physical exam)			41	15.6
Total			263	100.0
Provider Say Where To Pick Up Script				
Yes			183	69.6
No			80	30.4
Total			263	100.0
Aware Of Five Day Pharmacy Policy				
Yes			51	19.4
No			212	80.6
Total			263	100.0
Reasons For Not Picking Up Scripts***				
Forgot			40	15.2
Afraid of adverse reaction			6	2.3
Had medicine at home			48	18.3
Inconvenient to use			1	0.4
Wait in pharmacy too long			29	11.1
Did not know presc. was ordered			72	27.4
Other			98	37.3
Total			294	112.0

*Categories not mutally exclusive; **Pt. with two presc. was seen in two clinics; ***More than one reason given

TABLE 5

CHI-SQUARE* TEST FOR INDEPENDENCE BETWEEN AGE GROUP AND THE REASON FORGET

	Frequency			Percentages		
	≤45	>45	Total	≤45	>45	Total
Forget	40	0	40	17.7	0	15.2
Not forget	186	37	223	82.3	100	84.8
Totals	226	37	263	100.0	100	100.0

*Chi-square, with 1 degree of freedom = 7.72, $p < .01$. Age differences were found for forgetting to claim prescriptions.

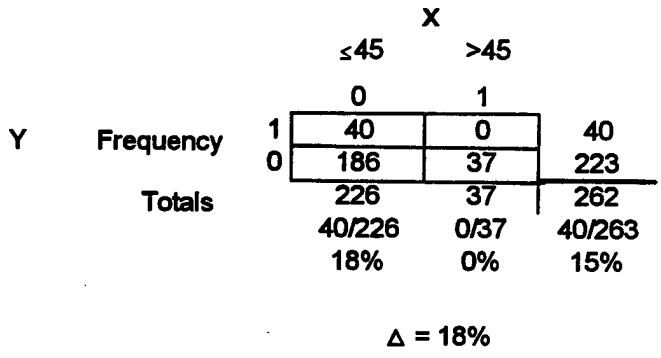
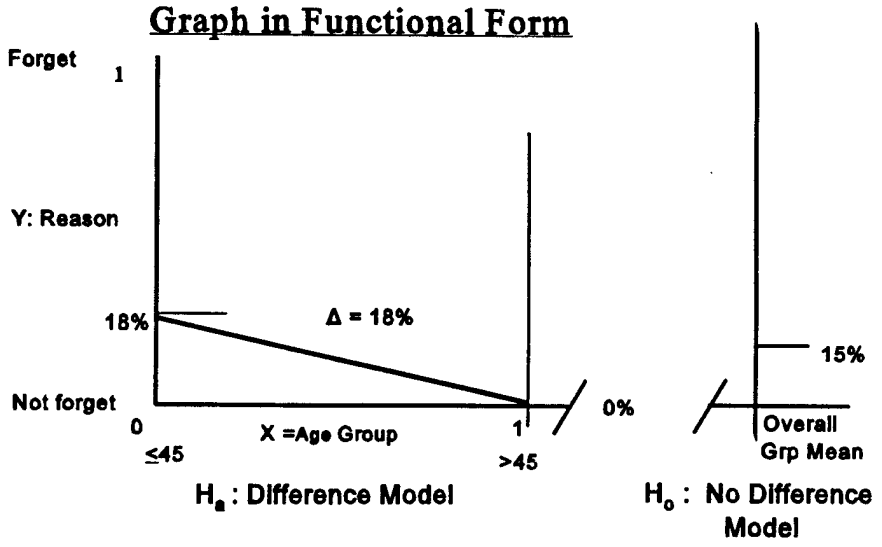


Fig.3. 2X2 Chi-square matrix for reason "forget" by age group.



Age Group: (263) Chi-Square (1) = 7.72, $p < .01$

Fig. 4. Reason "forget" by age group.

TABLE 6

ONE-SAMPLE CHI-SQUARE TEST FOR VARIABLE DID PROVIDER TELL PATIENT* WHERE TO PICK UP PRESCRIPTION

Category	Observed cases at DACH		Expected Cases	
	n	%	n	%
1; Yes	183	69.6	258	98
0; No	80	30.4	5**	2
Totals	263	100.0	263	100

χ^2 (1) = 1083.66, $p < .001$; *Patient reported; **Expected values >5 were used to compute χ^2

TABLE 7

ONE-SAMPLE CHI-SQUARE TEST FOR VARIABLE DID PATIENT FORGET TO PICK UP PRESCRIPTION

Category	Observed cases at DACH		Expected Cases From Literature	
	n	%	n	%
1; Yes	40	15.2	100	38
0; No	223	84.8	163	62
Totals	263	100.0	263	100

χ^2 (1) = 57.98, $p < .001$

TABLE 8

ONE-SAMPLE CHI-SQUARE TEST FOR VARIABLE DID PATIENT HAVE DRUG AT HOME

Category	Observed cases at DACH		Expected Cases From Literature	
	n	%	n	%
1; Yes	48	18.3	92	35
0; No	215	81.7	171	65
Totals	263	100.0	263	100

χ^2 (1) = 32.43, $p < .001$

TABLE 9

ONE-SAMPLE CHI-SQUARE TEST FOR VARIABLE DID PATIENT KNOW PRESCRIPTION HAD BEEN ORDERED

Category	Observed cases at DACH		Expected Cases From Literature	
	n	%	n	%
1; Yes	191	72.6	248	94.3
0; No	72	27.4	15	5.7
Totals	263	100.0	263	100.0

χ^2 (1) = 229.90, $p < .001$

TABLE 10

ONE-SAMPLE CHI-SQUARE TEST FOR VARIABLE PRESCRIPTION UNCLAIMED AT OB/GYN

Category	Observed cases DACH		Expected Cases Based On Previous Results at IACH	
	n	%	n	%
1; Yes	64	40.0	34	21.4
0; No	96	60.0	126	78.6
Totals	160	100.0	160	100.0

χ^2 (1) = 32.91, $p < .001$

TABLE 11

ONE-SAMPLE CHI-SQUARE TEST FOR VARIABLE PRESCRIPTION UNCLAIMED AT EMERGENCY DEPARTMENT

Category	Observed cases DACH		Expected Cases Based On Previous Results at IACH	
	n	%	n	%
1; Yes	45	17.1	21	91.9
0; No	218	82.9	242	8.1
Totals	263	100.0	263	100.0

χ^2 (1) = 28.68, $p < .001$

TABLE 12

ONE-SAMPLE CHI-SQUARE TEST FOR VARIABLE
UNCLAIMED ANTI-INFLAMMATORIES/ANALGESICS/ANTIPYRETICS

Category	Observed cas46es DACH		Expected Cases Based On Previous Results at IACH	
	n	%	n	%
1; Yes	72	27.4	46	17.5
0; No	191	72.6	217	82.5
Totals	263	100.0	263	100.0

X^2 (1) = 17.77, p < .001

TABLE 13

ONE-SAMPLE CHI-SQUARE TEST FOR VARIABLE
UNCLAIMED ANTIBIOTICS

Category	Observed cases DACH		Expected Cases Based On Previous Results at IACH	
	n	%	n	%
1; Yes	16	6.1	24	9.2
0; No	247	93.9	239	90.8
Totals	263	100.0	263	100.0

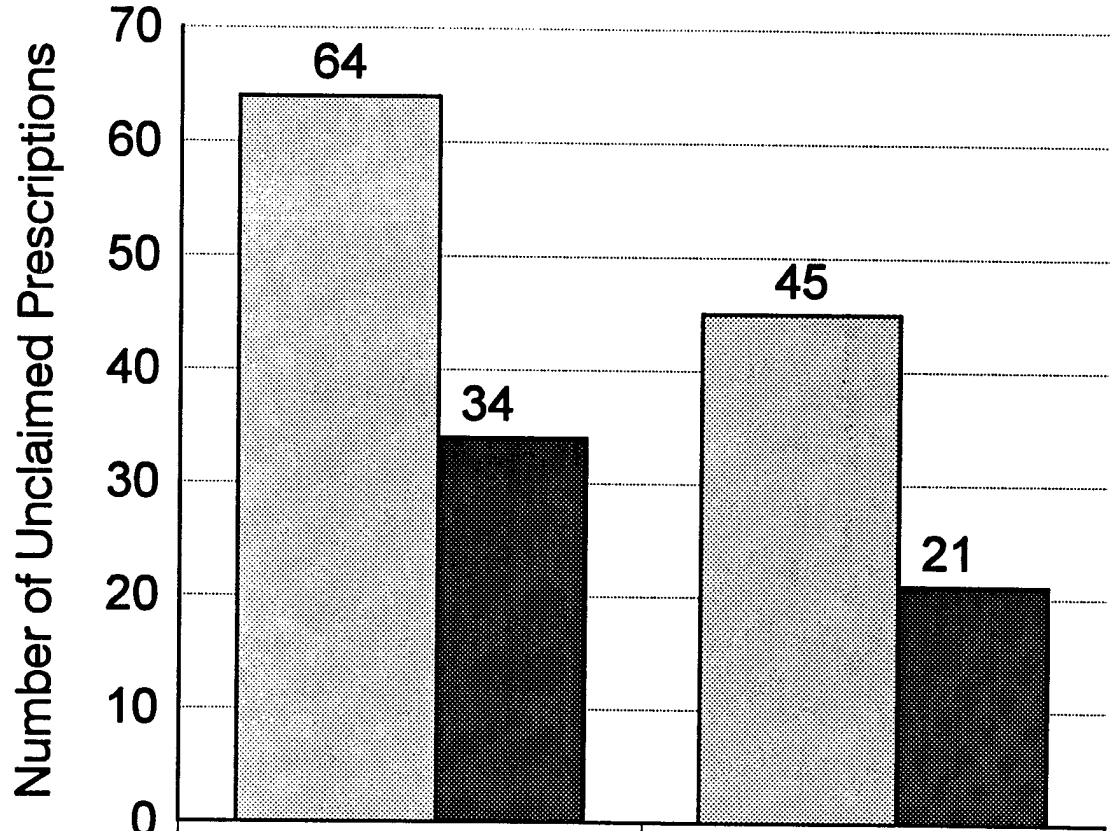
X^2 (1) = 3.06, p < .09; Not significant at the .05 level

TABLE 14

ONE-SAMPLE CHI-SQUARE TEST FOR VARIABLE
UNCLAIMED HYPERTENSION/HEART DISEASE

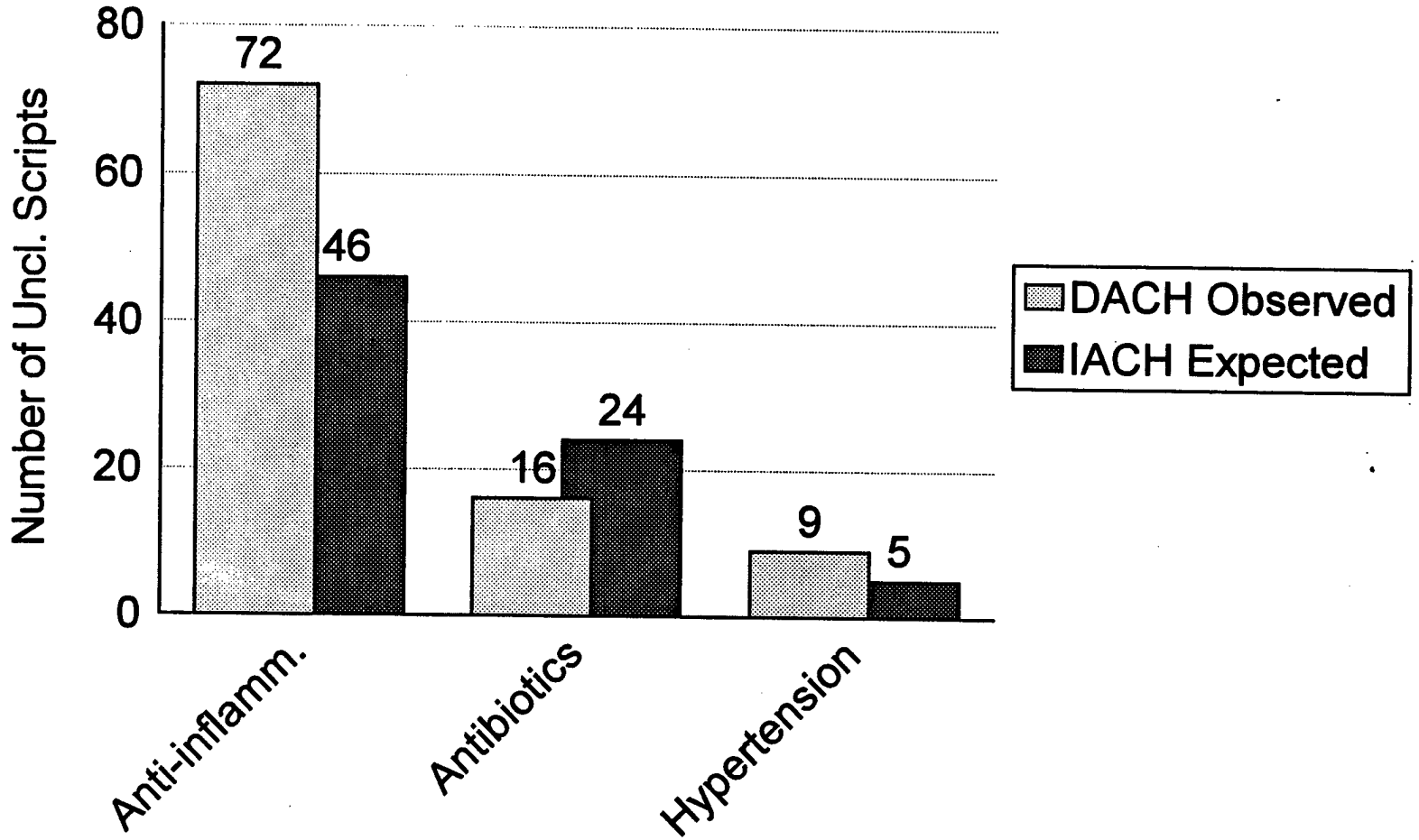
Category	Observed cases DACH		Expected Cases Based On Previous Results at IACH	
	n	%	n	%
1; Yes	9	3.4	5	2.0
0; No	254	96.6	258	98.0
Totals	263	100.0	263	100.0

X^2 (1) = 2.71, p < .10; Not significant at the .05 level



	OB/GYN	Emer. Dept.
DACH Observed	64	45
IACH Expected	34	21

Fig. 5. Clinic comparison between DACH and IACH regarding unclaimed prescriptions.



DACH Observed	72	16	9
IACH Expected	46	24	5

Fig. 6. Drug comparison between DACH and IACH regarding unclaimed prescriptions.

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APPENDICES

APPENDIX A

A Study of Advanced Practice Nurses

PART I.

Directions: Please respond to the following by placing an "X" in the space provided by your answer:

1. Are you currently working as an Advanced Practice Nurse (APN) ?

_____YES _____NO

---

2. Which one title most accurately describes your current APN position:

_____ (1) Nurse Practitioner
_____ (2) Nurse Anesthetist
_____ (3) Nurse Midwife
_____ (4) Clinical Nurse Specialist
_____ (5) Community Health Nurse
_____ (6) Other (specify) _____

PART II.

Directions: Read each item carefully. Next decide how satisfied you are with that aspect of your professional situation. Then indicate your answer by circling the number in the column under the heading that has the best answer. For example, read item 3. If you are "always satisfied" with your "overall professional practice," you should circle the number "5" on item 3. Please answer all of the items. All of the information on this questionnaire is important. Your answers will be kept confidential.

	How satisfied are you with...	Never Satisfied	Some-times Satisfied	Usually Satisfied	Most of the Time Satisfied	Always Satisfied	Not Appli-cable
3	Your overall professional practice?	1	2	3	4	5	N/A
4	Your current work setting?	1	2	3	4	5	N/A
5	Extent to which your current practice has met your expectations?	1	2	3	4	5	N/A
6	Potential to achieve your professional goals?	1	2	3	4	5	N/A
7	Quality of care you are able to provide?	1	2	3	4	5	N/A
8	Your ability to practice according to your best judgment?	1	2	3	4	5	N/A

	How satisfied are you with...	Never Satisfied	Some-times Satisfied	Usually Satisfied	Most of the Time Satisfied	Always Satisfied	Not Appli-cable
9	Efficiency with which you are able to practice in your facility?	1	2	3	4	5	N/A
10	Amount of time you are able to spend with each patient?	1	2	3	4	5	N/A
11	Number of patients you see on a typical day?	1	2	3	4	5	N/A
12	Continuity of patient care you are able to provide?	1	2	3	4	5	N/A
13	Quality of nursing staff?	1	2	3	4	5	N/A
14	Quality of ancillary staff?	1	2	3	4	5	N/A
15	Quality of clerical staff?	1	2	3	4	5	N/A
16	Your salary/income?	1	2	3	4	5	N/A
17	Non-salary benefits?	1	2	3	4	5	N/A
18	Amount of time you have for your family and personal life?	1	2	3	4	5	N/A
19	Amount of time you are required to be on call?	1	2	3	4	5	N/A
20	Opportunities to acquire new skills and knowledge?	1	2	3	4	5	N/A
21	Your ability to help form policies at your facility?	1	2	3	4	5	N/A
22	Professional abilities of providers in your facility?	1	2	3	4	5	N/A
23	Amount of time you spend practicing outside your specialty?	1	2	3	4	5	N/A
24	Your ability to arrange referrals to specialists?	1	2	3	4	5	N/A

PART III.

Directions: Please respond to the following:

	I plan to...	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree	Not Appli-cable
25.	R emain in the Military Health Services System (MHSS) or AMEDD until retirement eligible?	1	2	3	4	5	N/A

PART IV.

Directions: Read each item carefully. Next decide how accurately the item describes you and your professional behavior. Then indicate your answer by circling the number in the column under the heading that has the best answer. For example, read item 26. If you believe that you "take responsibility for your actions" "most of the time," you should circle the number "4" on item 26. Please answer all of the items. All of the information on this questionnaire is important. Your answers will be kept confidential.

	In my practice I...	Never	Some-times	Usually	Most of the time	Always	Not Appli-cable
26	Take responsibility and am accountable for my actions.	1	2	3	4	5	N/A
27	Have developed the image of myself as an independent professional.	1	2	3	4	5	N/A
28	Base my actions on the full scope of my knowledge and ability.	1	2	3	4	5	N/A
29	Self-determine my role and activities.	1	2	3	4	5	N/A
30	Derive satisfaction from what I do.	1	2	3	4	5	N/A
31	Take control over my environment and situations I confront.	1	2	3	4	5	N/A
32	Am valued for my independent actions.	1	2	3	4	5	N/A
33	Am constrained by bureaucratic limitations.	1	2	3	4	5	N/A
34	Provide quality services through my actions.	1	2	3	4	5	N/A

	In my practice I...	Never	Some-times	Usually	Most of the time	Always	Not Appli-cable
35	Am confident in my ability to perform my role independently.	1	2	3	4	5	N/A
36	Have been professionally socialized to take independent action.	1	2	3	4	5	N/A
37	Function with the authority to do what I know should be done.	1	2	3	4	5	N/A
38	Have too many routine tasks to exercise independent action.	1	2	3	4	5	N/A
39	Have a sense of professionalism.	1	2	3	4	5	N/A
40	Have the right and privileges I deserve.	1	2	3	4	5	N/A
41	Have the professional experience needed for independent actions.	1	2	3	4	5	N/A
42	Am restrained in what I can do because I am powerless.	1	2	3	4	5	N/A
43	Collaborate with others outside my field when I feel there is a need.	1	2	3	4	5	N/A
44	Derive feelings of self-respect and esteem from what I do.	1	2	3	4	5	N/A
45	Make my own decisions related to what I do.	1	2	3	4	5	N/A
46	Possess ownership of my practice; that is, my role belongs to me.	1	2	3	4	5	N/A
47	Have the power to influence decisions and actions of others.	1	2	3	4	5	N/A
48	Have a sense of self-achievement.	1	2	3	4	5	N/A
49	Am provided with a legal basis for independent functioning.	1	2	3	4	5	N/A
50	Demonstrate mastery of skills essential for freedom of action.	1	2	3	4	5	N/A
51	Have my activities and actions programmed by others.	1	2	3	4	5	N/A
52	Have the respect of those in other disciplines.	1	2	3	4	5	N/A

	In my practice I...	Never	Some-times	Usually	Most of the time	Always	Not Appli-cable
53	Cannot optimally function because I do not have legal status.	1	2	3	4	5	N/A
54	Establish the parameters and limits of my practice activities.	1	2	3	4	5	N/A
55	Accept the consequences for the choices I make.	1	2	3	4	5	N/A

PART V.

Directions: Read each item carefully. Next decide how accurately the item describes you and your professional behavior with other providers (physicians, other advanced practice nurses, and physician assistants). Then indicate your answer by circling the number in the column under the heading that has the best answer. For example, read item 56. If you believe that you "feel free to share ideas with one another" "most of the time," you should circle the number "4" on item 56. Please answer all of the items. All of the information on this questionnaire is important. Your answers will be kept confidential.

		Never	Some-times	Usually	Most of the time	Always	Not Appli-cable
56	We feel free to share ideas with each other.	1	2	3	4	5	N/A
57	We acknowledge one another's competence.	1	2	3	4	5	N/A
58	We support each others as team members.	1	2	3	4	5	N/A
59	We work as partners.	1	2	3	4	5	N/A
60	We are committed to working together as a team.	1	2	3	4	5	N/A
61	We trust one another.	1	2	3	4	5	N/A
62	There is a sharing of expertise and talents between us.	1	2	3	4	5	N/A
63	We work as "equals" or "partners" for the accomplishment of some goals.	1	2	3	4	5	N/A
64	We work together as a team.	1	2	3	4	5	N/A
65	My opinions are listened to.	1	2	3	4	5	N/A
66	I feel that my input is truly valued.	1	2	3	4	5	N/A

		Never	Some-times	Usually	Most of the time	Always	Not Appli-cable
67	We work together as associates.	1	2	3	4	5	N/A
68	There is a feeling of mutual regard and respect.	1	2	3	4	5	N/A
69	We make an effort to resolve any conflicts which arise to our mutual satisfaction.	1	2	3	4	5	N/A
70	We both actively participate in the relationship in order to meet out patient care goals.	1	2	3	4	5	N/A
71	We share information openly with one another.	1	2	3	4	5	N/A
72	We problem solve together.	1	2	3	4	5	N/A
73	We recognize the need to have a sense of "give and take" in the relationship.	1	2	3	4	5	N/A
74	We recognize our interdependence with one another in order to meet our goals.	1	2	3	4	5	N/A
75	We are committed to the process of working to meet our goals.	1	2	3	4	5	N/A

PART VI

Directions: Read each item carefully. Then indicate your answer by writing it in the box or space provided or by circling the number preceding the best response. Please answer all the items. Your answers will be kept confidential.

76. What is your age? (Write in box) ☐

77. What is your gender? (Circle one)
(1) Male
(2) Female

78. What is your rank/grade? (Write in box) ☐

79. What is your ethnic identification? (Circle one or write in space.)

(1) African-American
(2) Asian-American
(3) Caucasian-American
(4) Hispanic-American
(5) American-Indian
(6) other (write in) _____

---

80. What is your martial status? (circle one)

(1) Married
(2) Single, never married
(3) Single, previously married
(4) Widowed

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81. How many dependents under age 18 live in your home? (Write in the box.) ☐

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82. What is the **highest** educational level that you have completed? (Circle **only one**.)

(1) Bachelor's degree
(2) Post bachelor's certificate program (specify) _____
(3) Master's degree in nursing
(4) Ph.D.
(5) D.N.S.
(6) Ed.D.
(7) Other (specify) _____

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83. Number of years remaining on current service obligation. (Write in box.) ☐

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84. What is your career status? (Circle one)

(1) Voluntary Indefinite (VI)
(2) Regular Army (RA)
(3) Civilian
(4) other (specify) _____

85. Total number of active duty commissioned or federal service years? (Write in box.) ☐

86. Total number of active duty enlisted years? (Write in box.) ☐

87. Total number of years as a Registered Nurse (civilian and military) prior to attending APN program. (Write in box.) ☐

88. How many years ago did you graduate from your APN educational program? (Write in box.) ☐

89. What was your source of funding for your APN educational program? (Circle one.)

(1) Self (to include grants/scholarships)
(2) AMEDD
(3) GI Bill/Montgomery Bill
(4) Other

90. Approximate cost of total APN tuition? (Write in box.) $ ☐

91. Number of years of obligated service following funding for APN program, if applicable. (Write in box.) ☐

92. How many **years** have you worked as an APN in military medical treatment facilities? (Round to the nearest year.) ☐

93. How many **years** have you worked as an APN in civilian medical treatment facilities? (Round to the nearest year.) ☐

94. How many **years** have you worked in your current position? (Round to the nearest year.) ☐

95. How many assignments (geographic locations) have you had as an APN? (Circle one.)

(1) One
(2) Two
(3) Three
(4) Four
(5) Five or more

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96. Are you a graduate of: (Circle one)

(1) ROTC
(2) AMEDD Commissioning Program
(3) Army Student Nurse Program
(4) Walter Reed Army Institute of Nursing (WRAIN)
(5) None of the above - Direct Commission
(6) Uniformed Services University of Health Services (USUHS)
(7) Other (specify) _____

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97. Circle all occupational credentials you have earned. (Please do not abbreviate any additional credentials.)

(1) American Nurses Credentialing Center Certification as Clinical Nurse Specialist
(2) American Nurses Credentialing Center Certification as Clinical Nurse Practitioner
(3) Certified Nurse Midwife
(4) Certified Registered Nurse Anesthetist
(5) other _____
(6) other _____

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98. Circle or list all professional organizations in which you hold membership. (Please do not abbreviate.)

(1) American Nurses Association (ANA)
(2) American Public Health Association (APHA)
(3) American Association of Nurse Anesthetists
(4) Association of Women's Health, Obstetric and Neonatal Nurses
(5) Other _____

99. Is your immediate clinical supervisor (or person who supervises your patient care activities) a: (Circle one.)

(1) Physician
(2) Another APN
(3) Registered Nurse (but not another APN)
(4) other _____

100. Is your rater (for annual performance appraisals/OERs) the same as your immediate clinical supervisor as identified in item # 99? (Circle one.)

YES **NO**

101. If your rater (person identified in item # 100) is a different individual than your immediate clinical supervisor, is he/she a: (Circle one.)

(1) Not applicable
(2) Physician
(3) Another APN
(4) Registered Nurse (but not another APN)
(5) other _____

102. Is your senior rater a: (Circle one.)

(1) Physician
(2) Another APN
(3) Registered Nurse (but not another APN)
(4) other _____

PART VII.

Directions: Please answer the following questions regarding job scope and perceptions of your current APN role in the AMEDD. You may expand on any question in the space by each item or attach a separate page.

103-127. Place an "X" by any item that pertains to your current job scope, major tasks, and responsibilities.

_____ (103) Inpatient caseload
_____ (104) Outpatient caseload
_____ (105) Function as a case manager
_____ (106) Provide consultation services to other nursing staff
_____ (107) Provide consultation services to non-nursing staff
_____ (108) Prescriptive authority by protocols
_____ (109) Prescriptive authority by approved list of medications
_____ (110) Inpatient admitting privileges
_____ (111) Clinical supervision of paraprofessionals/enlisted
_____ (112) Administrative supervision of paraprofessionals/enlisted
_____ (113) Clinical supervision of other Registered Nurses
_____ (114) Administrative supervision of Registered Nurses
_____ (115) Clinical supervision of other APNs
_____ (116) Administrative supervision of other APNs
_____ (117) Clinical supervision of other professionals
_____ (118) Administrative supervision of other professionals
_____ (119) Authority to order diagnostic test (i.e., lab, x-ray, etc.)
_____ (120) Individual patient teaching
_____ (121) Patient teaching in groups
_____ (122) Support groups
_____ (123) Use clinical pathways or care maps for patient care
_____ (124) Use treatment protocols or algorithms for patient care
_____ (125) Administrative duties for Department of Nursing (i.e., Evening Supervisor, etc.) - please list

_____ (126) Administrative duties outside of Department of Nursing (i.e., AOD, etc.) - please list

_____ (127) Other major responsibilities within job scope - please list

128. Place an "X" by any committees to which you belong at your Medical Treatment Facility (MTF)/Command.

_____ (1) Nursing Executive Committee
_____ (2) Safety
_____ (3) Risk Management
_____ (4) Special Care
_____ (5) Quality Improvement
_____ (6) Credentials
_____ (7) Library
_____ (8) Infection Control
_____ (9) Utilization Management
_____ (10) Research
_____ (11) Pharmacy & Therapeutics
_____ (12) Medical Records
_____ (13) other (specify) _____
_____ (14) other (specify) _____

129. Does your practice involve peer review?

_____ **YES** _____ **NO**

130. Does your facility/Command have a regularly scheduled meeting for APNs?

_____ **YES** _____ **NO**

131. Are you involved in an APN support group in your facility/Command?

_____ **YES** _____ **NO**

132. Are you involved in an APN support group outside the facility/Command (i.e., in the civilian community?)

_____ **YES** _____ **NO**

133. In your current APN role, are you involved in research?

_____ **YES** _____ **NO**

If your answer is "yes", go to item 134. If your answer is "no", go to item 135.

134. Place an "X" by any research activity in which you are involved.

_____ (1) Library research
_____ (2) Assisting staff with research projects
_____ (3) Internet searches
_____ (4) Recently completed a research project
_____ (5) Critiques of research articles
_____ (6) Actively involved in a research project
_____ (7) Writing article for publication
_____ (8) other (specify) _____

135. Place an "X" by any barriers to engaging in research in your current position.

_____ (1) Heavy patient case load
_____ (2) Administrative duties
_____ (3) Lack of time
_____ (4) Funding
_____ (5) No forum for research approval at your MTF
_____ (6) No formal emphasis to engage in research
_____ (7) other (specify) _____

136. Approximately how many continuing education credits are required for you to maintain your clinical credentials? Check one that most accurately describes requirement.

_____ (1) Less than 20 every 2 years or less than 10 every year
_____ (2) 20 - 30 every 2 years or 10 - 15 every year
_____ (3) More than 30 every 2 years or more than 15 every year
_____ (4) None

137-146. Please estimate the percentage of time spent during any "usual" month (excluding months when you are largely engaged in activities away from your typical practice, i.e., lengthy TDYs, leaves, etc.) in the following activities. Indicate your answer by circling the appropriate category. (Your answers may not add up to 100%.)

	Less than 10%	10-25%	26-49%	50-74%	75-100%	Not Applicable
(137) Clinical time (Direct patient care activities)	1	2	3	4	5	N/A
(138) Consultation	1	2	3	4	5	N/A
(139)Patient teaching	1	2	3	4	5	N/A
(140) Providing staff education/training	1	2	3	4	5	N/A
(141) Professional development to maintain your credentials	1	2	3	4	5	N/A
(142) Research projects	1	2	3	4	5	N/A
(143) Committee work	1	2	3	4	5	N/A
(144) Staff meetings	1	2	3	4	5	N/A
(145) Other administrative/non-clinical functions	1	2	3	4	5	N/A
(146) Other clinical functions	1	2	3	4	5	N/A

147. How is workload measured for APN practice at your facility? (Place an "X" by all that apply.)

_____ (1) Monthly APN utilization survey worksheet (MEPRS)
_____ (2) Computerized clinic/department specific "log"
_____ (3) "Pencil and paper" clinic/department specific "log"
_____ (4) Ambulatory Data System (ADS)
_____ (5) CHCS
_____ (6) Encounter forms (forms that classify the client according to diagnoses or procedure)
_____ (7) Other (specify) _____

148. Do you believe your APN workload is being accurately captured given the current workload measurement system at your clinic/facility?

_____ YES **_____ NO**

149. How would you recommend improving measurement of workload for APN practice? (Briefly describe.)

150. Do you believe you are being fully utilized as an APN?

_____ YES **_____ NO**

151. If your answer to item 150 is "No", place an "X" by all factors you believe hinder your full utilization.

_____ (1) Not applicable
_____ (2) Too many non-APN tasks
_____ (3) Lack specific credentials
_____ (4) Lack prescriptive authority
_____ (5) Other (specify) _____

152. Do you believe an assignment in the APN role is helpful for promotion?

_____ **YES** _____ **NO**

---

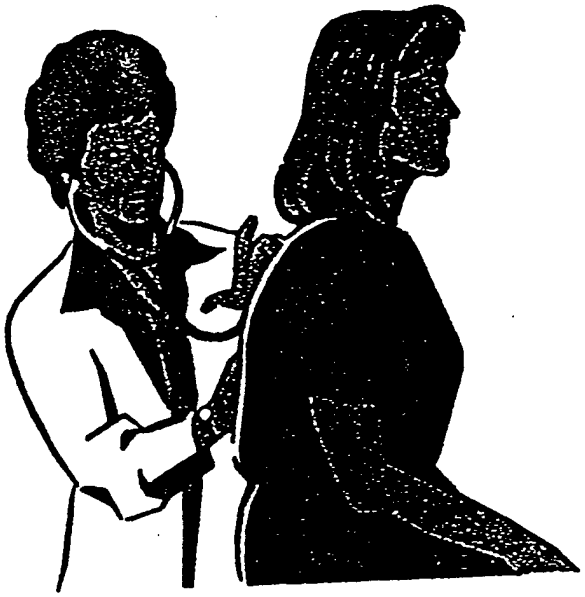
153. Which choices, listed below, would you consider are important in the composition of an "ideal" APN assignment? (Place and "X" by all that apply.)

_____ (1) Geographic location
_____ (2) Administrative support
_____ (3) Collegial relationships
_____ (4) Available resources
_____ (5) Support of enlisted/paraprofessionals
_____ (6) Supportive supervisor
_____ (7) Patient population/Types of patients
_____ (9) Other (specify) _____

REFERENCE NOTES:

Items 3 through 24 taken from an instrument adapted from Kravitz et al. (1988) and used in a study by Mays, Marks & Byer (1996)
Items 26 through 55 taken from an instrument adapted from Dempster (1988) and used in a study by Mays, Marks & Byer (1996)
Items 56 through 75 taken from an instrument adapted from Stichler (1992) and used in a study by Mays, Marks & Byer (1996)

ADVANCED PRACTICE NURSE



UTILIZATION

APN UTILIZATION

INPATIENT CARE Direct or indirect care performed for a hospitalized patient, or interactions essential to health care of the inpatient. Include time spent in patient care conferences and/or consultations with other health care providers, family members, significant others concerning the hospitalized patient, case management activities, discharge planning and telephone interactions. Include time spent conducting preoperative visits, pain management care (acute or chronic), IV initiation, labor epidurals and resuscitation efforts, i.e. CODES, follow-up of job related hospitalizations, telephone consults and liaison between physician, employee and supervisor.

INPATIENT CARE - Hours entered under this category will be distributed only to the A & D MEPRS Codes on the survey.

OUTPATIENT CARE Direct or indirect care performed for a non-hospitalized patient, or interactions essential to health care of the outpatient. Include time spent in patient care conference and/or consultations with other health care providers, family members, significant others concerning non-hospitalized patient, case management activities, and telephone interactions. Include time spent conducting preoperative interviews for same day surgery, invasive or diagnostic procedures, pain management (acute or chronic), IV initiation, nursing health appraisals, fitness for duty determinations, pre-employment physicals, pregnancy surveillance, immunizations, follow-up visits, emergency care services for job related injuries or illnesses, potential hazardous exposures, crisis intervention, medical screening tests and illness/absence monitoring.

OUTPATIENT CARE - Hours entered under this category will be distributed only to the B & D MEPRS Codes on the survey.

HOME VISIT - Direct or indirect care provided to a patient at their living quarters, either private or residential care facility. Include time spent in support and interactions essential to health care of patients, time spent in consultations with other health care providers concerning the patient, and travel time for the visit.

HOME VISITS - Hours entered under this category will be distributed only to the B MEPRS Codes on the survey.

CALL

IN-HOUSE Time spent IN THE MTF, when pulling Call duty.

AT-HOME Time spent not actually performing patient care, but required to be accessible if needed. Include time spent on call for Chemical Accident Incident Response Assistance (CAIRA).

OR TIME - Time spent in the operating room, delivery room, minor surgery suite, or same day surgery suite. Include scrub time, recovery room time, time spent documenting in the inpatient record, same day surgery record, or outpatient record.

OR TIME - Hours entered under this category will be distributed only to the A & D MEPRS Codes on the survey.

ADMINISTRATION Time spent away from patient care or clinical duties in response to administrative requirements. Includes duties not a part of the primary nursing role, scheduled and unscheduled meetings, assigned special projects, conferences, process action teams and related activities. Include time spent performing various functions related to program accreditation, student education and oversight/supervision, preparating policies, procedures, protocols, SOPs, directives, maintaining training records, conducting investigations, command briefings, scheduling, marketing activities, personnel, logistical, and resource management activities. Consider time spent doing clinically focused administrative duties such as chart reviews, quality improvement activities, needs assessments for mass screening programs and peer review.

ADMIN TIME - Hours entered under this category will be distributed only to EBD MEPRS Codes if on the survey, otherwise uses the codes appearing on the survey.

NON-CLINICAL DUTIES - Time spent performing health care consultation and inspection activities not related to direct or indirect nursing care.

On-Site Visits - Visits to activities or sites to determine compliance with regulatory guidance and health codes, or to inspect working conditions and hazardous exposure investigations.

Data Reporting - Time spent performing medical surveillance activities and all required reporting. Include time spent preparing reports (MED-302, DA Form 3076, AMC Metrics Data), Work Site Reports, Trip Reports, MIMS data entry, UCAPERS and other non-patient related data entry.

Technical Advisor - Time spent providing technical or clinical expertise or guidance to consumers, i.e., installation/unit commanders, facility/service managers, or the civilian community. May occur at non-MTF committees and meetings. Consider coordination with Industrial Hygiene, civilian/military agencies (Public Health Department, Fire Department, CPO, MILPO, Post Safety), private physicians, civilian health clinics/agencies, and union offices.

NON-CLINICAL DUTIES - 'FC' MEPRS code must be on survey, otherwise error will occur during Clinician Reconciliation.

PATIENT/COMMUNITY EDUCATION - Time spent developing and providing formal or informal instruction or teaching to an inpatient, outpatient, significant other or consumer groups related to health promotion and wellness, disease prevention or management of a medical condition or problem. Include inservices, supervisor's orientation, health education/counseling and safety education classes.

Patient/Comm Ed - Hours entered under this category will be distributed based on the survey.

CONTINUING EDUCATION - Time spent attending local formal professional development conferences, classes, or professional meetings. Include time spent developing/preparing student lectures.

Cont' Ed - FAL MEPRS code must be on survey, otherwise error will occur during Clinician Reconciliation.

STAFF EDUCATION Time spent developing, preparing and presenting inservices or classes (one-on-one or group), CEU presentations and formal academic lectures directed to fellow staff, and staff orientations.

Staff Ed - EBF MEPRS code must be on survey, otherwise error will occur during Clinician Reconciliation.

RESEARCH Time spent in planning and conducting a research project, preparing for a local/regional/national conference and/or professional lecture, or doing professional reading of the research literature related to one's practice.

Research - EBE MEPRS code must be on survey, otherwise error will occur during Clinician Reconciliation.

TDY A period of authorized absence from the duty station for either official or permissive duty.

Mission - Time spent participating in duty related conferences directed or conducted by sources external to the unit, for administrative development or personal administrative requirements.
Training - Time spent participating in formal skills self development courses/programs.
Consultant - Time spent conducting or providing formal skills development or consultative services away from the assigned MTF.

Mission - Automatically mapped to assigned workcenter APC.
Training - MEPRS Code assigned during TDY Reconciliation.
Consultant - Hours entered under this category will be distributed to FCB during TDY Reconciliation. These hours must be charged to an APC with a FCB MEPRS Code.

DAY OFF Regularly scheduled non-duty day

LEAVE Authorized absence from place of duty chargeable against the person's leave account.

HOLIDAY TIME Authorized time off in observance of a national holiday or time off in lieu of the actual holiday for personnel required to work the holiday.

COMP TIME TAKEN Time given off to make up for time worked over and above normal duty.

NURSING SECTION

INPATIENT VISIT - Number of interactions with patients, family members/significant others of patients admitted to an MTF and whose hospital stay exceeds 24 hours. Include telephone interactions with family members/significant others.

OUTPATIENT VISIT - Number of interactions with patients, family members/significant others of patients in an ambulatory care/outpatient setting OR who may be admitted, i.e. Same Day Surgery, but whose length of admission is less than 24 hours. Include treatment of illness, physical exam, individual health teaching, prescription refill, telephone interactions with patients, family members/significant others. DO NOT count patients seen in group session unless a one-to-one interaction occurs that is documented in the medical record.

HOME VISIT - Number of visits to a patient at his living quarters, private or residential care, for the purpose of providing direct/indirect care, clinical assessment or evaluation of services being provided by another agency.

CASE MANAGEMENT - Number of patients being provided case management services to include both active and inactive cases.

ADMISSIONS - Number of admissions to the MTF.

DISPOSITIONS - Number of dispositions from the MTF.

BIRTHS - Number of births.

EPISODES OF ANESTHESIA - Number of anesthesia episodes.

MINUTES OF SERVICE (anesthesia only) - The interval of time spent by the CRNA with the patient from initial contact in the pre-anesthesia holding area until release to the care of other nursing staff responsible for post anesthesia recovery.

ENTERED 96 JAN 13

USA - PERSONNEL UTILIZATION SYSTEM
ADVANCED PRACTICE NURSE UTILIZATION/SURVEY WORKSHEET - MONTH ENDING _____, FOR FY96
LANDSTUHL

UNIT/WORK CENTER: HDQP HSSA COMMAND GROUP /11 MEPRS CODE: FCDH DEPT/DIV: 110 DEPT OF HSCA
NAME: DAVIS, MARY C. ID CODE: D1301 RANK: COL PMOS/SSI/JOB SERIES 66B

							TOTAL
INPATIENT CARE							
OUTPATIENT CARE							
HOME VISITS							
CALL							
IN-HOUSE							
AT-HOME							
OR TIME							
ADMIN TIME							
NON-CLIN DUTIES							
PT/COMMUNITY ED							
CONTINUING ED							
STAFF EDUCATION							
RESEARCH							

							TOTAL
TDY							
MISSION							
TRAINING							
CONSULTANT							
LEAVE							
HOLIDAY TIME							
COMP TAKEN							
DAY OFF							
OTHER AVAILABLE							
_____							
_____							
_____							
OTHER NON-AVAIL							
_____							
_____							

INPATIENT VISITS	____	ADMISSIONS	____	OUTPATIENT VISITS	____
DISPOSITIONS	____	HOME VISITS	____	BIRTHS	____
CASE MGMT PTS	____	EPISODES OF ANETH	____	MINS OF SERVICE	____

B-7

CURRENT DISTRIBUTION			NEW DISTRIBUTION	
MEPRS CODE	MEPRS CODE DESCRIPTION	PERCENT	MEPRS CODE	PERCENT
FCDH	HSSA, HEADQUARTERS EU	100	__ __	____
			__ __	____
			__ __	____
			__ __	____

APPENDIX C

LETTER TO PARTICIPANTS

MCEUL-DCA

MEMORANDUM FOR SURVEY PARTICIPANTS

SUBJECT: Advanced Practice Nurse Survey

1. The enclosed Survey of Advanced Practice Nurses (APNs) contains questions about the role, job satisfaction, and intent to stay in the military health care system, of Advanced Practice Nurses in Army Medical Department facilities. For purposes of this study, APNs include nurse practitioners, clinical nurse specialists, nurse anesthetists, nurse midwives, and community health nurses.

2. Please complete the survey and return it sealed, in the envelope provided, to the individual who gave you the survey. If you wish, you may return the completed survey directly to the undersigned at: LRMC, CMR 402 Box 2148, APO AE 09180. All answers are strictly confidential and your responses will not be tracked back to you as an individual. If you have questions, you may contact me at DSN 486-8830 or 8199, Commercial at 011-49-6371-86-8830 or 8199, FAX at 011-49-86-8829, or cc mail at LRMC1_LANDSTUHL.

3. Your time and cooperation in completing the survey are personally appreciated. If you would like to receive a summary of the completed project, please contact me with your mailing address or ccmail address.

Encl

CATHY J. JOHNSON
Lieutenant Colonel, AN
Resident, U.S. Army-Baylor
University Graduate Program
in Health Care Administration

APPENDIX D
LETTER TO POINTS OF CONTACT (POCs)

MCEUL-DCA

MEMORANDUM FOR POINTS OF CONTACT (POCS)

SUBJECT: Advanced Practice Nurse Survey

1. Thank you for volunteering as a Point of Contact for this study of Advanced Practice Nurses (APNs). As per our earlier conversations, please distribute the enclosed survey packet with Letter to Volunteer Participants and Survey Instrument to all Advanced Practice Nurses in your facility. For purpose of this project, APNs include all nurse practitioners, clinical nurse specialists, certified nurse midwives, certified registered nurse anesthetists, and community health nurses.

2. As stated in the Letter to Participants, each participant has been asked to complete the survey and return the completed survey in a sealed envelope to you or directly to me. Please do not open the envelopes you receive but return them, in aggregate, to me at: LRMC, CMR 402 Box 2148, APO AE 09018. One week after you distribute the survey packets, I would greatly appreciate it if you would remind the APNs to return the surveys. Please return all completed surveys you have collected to me, within two weeks of your initial distribution to the APNs.

3. Your participation in this survey is greatly appreciated. If you are interested in receiving a summary of the project results, please contact me through ccmail at LRMC1_ LANDSTUHL, DSN 486-8830 or 8199, Commercial 011-49-6371-86-8830 or 8199, or FAX 011-49-6371-86-8829.

Encls
Survey Packets

CATHY J. JOHNSON
Lieutenant Colonel, AN
Administrative Resident, U.S. Army-
Baylor University Graduate Program in
Health Care Administration

APPENDIX E
LETTER TO DEPUTY COMMANDERS FOR NURSING/CHIEF NURSES

MCEUL-DCA 6 December 1996

MEMORANDUM THRU

Colonel Mary A. Svetlik, Deputy Commander for Administration, Landstuhl Regional Medical Center, CMR 402 APO AE 09180

Colonel Carolyn Bulliner, Deputy Commander for Nursing, Landstuhl Regional Medical Center, CMR 402, APO AE 09180

FOR DEPUTY COMMANDER FOR NURSING (Selected AMEDD MTFs)

SUBJECT: Survey of Advanced Practice Nurses

1. As per our earlier contact, enclosed please find a copy of the survey packet that Advanced Practice Nurses (APN) will be asked to complete as volunteers in the graduate management project, "A Study of Advanced Practice Nurses in Army Medical Department Facilities." For purposes of this study, APNs include nurse practitioners, clinical nurse specialists, certified nurse midwives, certified registered nurse anesthetists, and community health nurses.

2. If you have any questions, please do not hesitate to contact me through ccmail at LRMC1_LANDSTUHL, DSN 486-8830/8199, or Commercial 011-49-6371-86-8830. I appreciate the voluntary participation of the APNs in your facility.

Encl

CATHY J. JOHNSON
LIEUTENANT COLONEL, AN
Resident, U.S. Army-Baylor University
Graduate Program in Health Care Administration

APPENDIX F
GLOSSARY/DEFINITIONS

Advanced Practice Nurse (APN): An "umbrella term" given to registered nurses who have met advanced educational and clinical practice requirements beyond the basic entry level nursing education required of registered nurses. Four groups of APNs are Clinical Nurse Specialists, Nurse Practitioners, Certified Registered Nurse Anesthetists, and Certified Nurse Midwives (ANA *Fact Sheet* 1993).

Autonomy: The opportunity and authority to practice within the full scope of APN educational preparation and clinical experience without undue restrictions from external agents/other professional groups such as physicians (adapted from Mays et al unpublished study 1996).

Collaboration: The opportunity to interact with peers and other professional healthcare providers (i.e., physicians and physician assistants) in providing patient care, discussing patient care issues, providing professional development programs, etc. (adapted from Mays et al unpublished study 1996).

Clinical Nurse Specialist (CNS): "An advanced practitioner in a nursing specialty who practices primarily in acute care inpatient institutions...The four traditional functional areas, patient care, teaching, consultation, and scholarship/research, are well documented in the literature" (Nuccio et al 1993, 123).

Intent to Stay: Future plans to remain or leave (turnover) an organization (Yoder 1992).

Non-physician Provider: An 'umbrella term' frequently used for APNs and Physicians' Assistants PAs).

Certified Registered Nurse Anesthetist (CRNA): Registered nurses who complete two to three years additional education beyond the four year bachelor of science in nursing, as well as meeting national certification and recertification requirements (ANA *Nursing Facts*, 1993).

Certified Nurse Midwife (CNM): Registered Nurses with an average of one and one-half years of specialized education beyond the entry level nursing program, either from an accredited certificate program or, increasingly at the graduate degree level (ANA *Nursing Facts*, 1993).

Nurse Practitioner (NP): Registered nurses with education beyond basic entry level nursing who provide direct patient care services, usually in outpatient settings. Most of the approximately 150 NP educational programs confer a master's degree as of 1993. At least 36 states require national certification by the ANA or a speciality nursing organization (ANA *Nursing Facts* 1993).

Provider Satisfaction: Degree to which individuals appear to like their job (Cavanaugh cited by Yoder 1992).

Turnover: Voluntarily leaving an organization, by resignation, or involuntarily leaving by dismissal; the literature primarily focuses on voluntary leaving (Yoder 1992).

APPENDIX G
DESCRIPTIVE FINDINGS

Table 1a.--Location of APNs-overseas (OCONUS) or in the U.S. (CONUS) and in MEDCEN or MEDDAC

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00 OCONUS MEDCEN A	23	27.1	27.1	27.1
	2.00 OCONUS MEDDAC A	6	7.1	7.1	34.1
	3.00 OCONUS MEDDAC B	14	16.5	16.5	50.6
	4.00 CONUS MEDCEN B	18	21.2	21.2	71.8
	5.00 CONUS MEDDAC C	11	12.9	12.9	84.7
	6.00 CONUS MEDDAC D	13	15.3	15.3	100.0
	Total	85	100.0	100.0	
Total		85	100.0		

Table 2a.--Highest educational level completed- (all current APNs)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00 BACHELOR'S DEGREE	13	15.3	15.3	15.3
	2.00 POST BACHELOR CERTIFICATE	3	3.5	3.5	18.8
	3.00 MASTER'S IN NURSING	55	64.7	64.7	83.5
	7.00 OTHER-SPECIFY	14	16.5	16.5	100.0
	Total	85	100.0	100.0	
Total		85	100.0		

Table 3a.--APNs involved in library research

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	71	83.5	86.6	86.6
	1.00 yes	11	12.9	13.4	100.0
	Total	82	96.5	100.0	
Missing	9.00 no response	3	3.5		
	Total	3	3.5		
Total		85	100.0		

Table 3b.-- APNs assisting staff with research projects

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	74	87.1	90.2	90.2
	1.00 yes	8	9.4	9.8	100.0
	Total	82	96.5	100.0	
Missing	9.00 no response	3	3.5		
	Total	3	3.5		
Total		85	100.0		

Table 3c.-- APNs involved in Internet searches

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	73	85.9	89.0	89.0
	1.00 yes	9	10.6	11.0	100.0
	Total	82	96.5	100.0	
Missing	9.00 no response	3	3.5		
	Total	3	3.5		
Total		85	100.0		

Table 3d.--APNs recently completing research project

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	79	92.9	96.3	96.3
	1.00 yes	3	3.5	3.7	100.0
	Total	82	96.5	100.0	
Missing	9.00 no response	3	3.5		
	Total	3	3.5		
Total		85	100.0		

Table 3e.-- APNs involved in critique of research articles

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	73	85.9	89.0	89.0
	1.00 yes	9	10.6	11.0	100.0
	Total	82	96.5	100.0	
Missing	9.00 no response	3	3.5		
	Total	3	3.5		
Total		85	100.0		

Table 3f.-- APNs actively involved in research project

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	76	89.4	92.7	92.7
	1.00 yes	6	7.1	7.3	100.0
	Total	82	96.5	100.0	
Missing	9.00 no response	3	3.5		
	Total	3	3.5		
Total		85	100.0		

Table 3g.--APNs writing an article for publication

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	75	88.2	91.5	91.5
	1.00 yes	7	8.2	8.5	100.0
	Total	82	96.5	100.0	
Missing	9.00 no response	3	3.5		
	Total	3	3.5		
Total		85	100.0		

Table 3h. APNs involved in research activities not previously listed

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	77	90.6	93.9	93.9
	1.00 yes	5	5.9	6.1	100.0
	Total	82	96.5	100.0	
Missing	9.00 no response	3	3.5		
	Total	3	3.5		
Total		85	100.0		

Table 4a.--Heavy patient case load as a research barrier

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	54	63.5	65.1	65.1
	1.00 yes	29	34.1	34.9	100.0
	Total	83	97.6	100.0	
Missing	9.00 no response	2	2.4		
	Total	2	2.4		
Total		85	100.0		

Table 4b.--Administrative duties as a research barrier

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	66	77.6	79.5	79.5
	1.00 yes	17	20.0	20.5	100.0
	Total	83	97.6	100.0	
Missing	9.00 no response	2	2.4		
	Total	2	2.4		
Total		85	100.0		

Table 4c.-- Lack of time as a research barrier

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	39	45.9	47.0	47.0
	1.00 yes	44	51.8	53.0	100.0
	Total	83	97.6	100.0	
Missing	9.00 no response	2	2.4		
	Total	2	2.4		
Total		85	100.0		

Table 4d.-- Lack of funding as a research barrier

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	69	81.2	83.1	83.1
	1.00 yes	14	16.5	16.9	100.0
	Total	83	97.6	100.0	
Missing	9.00 no response	2	2.4		
	Total	2	2.4		
Total		85	100.0		

Table 4e. No forum for research as a research barrier

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	75	88.2	90.4	90.4
	1.00 yes	8	9.4	9.6	100.0
	Total	83	97.6	100.0	
Missing	9.00 no response	2	2.4		
	Total	2	2.4		
Total		85	100.0		

Table 4f. No formal emphasis on research as a research barrier

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	66	77.6	79.5	79.5
	1.00 yes	17	20.0	20.5	100.0
	Total	83	97.6	100.0	
Missing	9.00 no response	2	2.4		
	Total	2	2.4		
Total		85	100.0		

Table 4g. Other research barrier not previously identified

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	74	87.1	89.2	89.2
	1.00 yes	9	10.6	10.8	100.0
	Total	83	97.6	100.0	
Missing	9.00 no response	2	2.4		
	Total	2	2.4		
Total		85	100.0		

Table 5a.-- Descriptive statistics for satisfaction subscales-(all APNs)

	N							
	Valid	Missing	Mean	Median	Mode	Std. Deviation	Variance	Range
OVERSAT	85	0	21.8353	23.0000	24.00[a]	4.2534	18.0916	21.00
QOFCARE	85	0	20.5412	21.0000	19.00	3.5104	12.3227	19.00
TIMECLIN	85	0	10.5176	11.0000	12.00	2.6530	7.0384	12.00
SUPSTAFF	85	0	9.9882	10.0000	12.00	2.6254	6.8927	12.00
REWARD	85	0	6.6235	7.0000	8.00	2.1546	4.6423	8.00
TIMEPERS	85	0	4.8235	5.0000	4.00	2.1557	4.6471	9.00

a. Multiple modes exist. The smallest value is shown

Table 5b.--Frequencies of scores of the subscale of overall satisfaction-(all APNs)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	9.00	1	1.2	1.2	1.2
	10.00	1	1.2	1.2	2.4
	13.00	1	1.2	1.2	3.5
	14.00	3	3.5	3.5	7.1
	15.00	1	1.2	1.2	8.2
	16.00	5	5.9	5.9	14.1
	17.00	1	1.2	1.2	15.3
	18.00	3	3.5	3.5	18.8
	19.00	5	5.9	5.9	24.7
	20.00	8	9.4	9.4	34.1
	21.00	4	4.7	4.7	38.8
	22.00	9	10.6	10.6	49.4
	23.00	9	10.6	10.6	60.0
	24.00	10	11.8	11.8	71.8
	25.00	8	9.4	9.4	81.2
	26.00	10	11.8	11.8	92.9
	27.00	1	1.2	1.2	94.1
	28.00	1	1.2	1.2	95.3
	29.00	3	3.5	3.5	98.8
	30.00	1	1.2	1.2	100.0
	Total	85	100.0	100.0	
Total		85	100.0		

Table 5c-- Frequencies of scores on the quality of care subscale-(all APNs)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	9.00	1	1.2	1.2	1.2
	13.00	1	1.2	1.2	2.4
	14.00	2	2.4	2.4	4.7
	15.00	2	2.4	2.4	7.1
	16.00	3	3.5	3.5	10.6
	17.00	5	5.9	5.9	16.5
	18.00	9	10.6	10.6	27.1
	19.00	12	14.1	14.1	41.2
	20.00	6	7.1	7.1	48.2
	21.00	9	10.6	10.6	58.8
	22.00	11	12.9	12.9	71.8
	23.00	7	8.2	8.2	80.0
	24.00	4	4.7	4.7	84.7
	25.00	8	9.4	9.4	94.1
	26.00	1	1.2	1.2	95.3
	27.00	3	3.5	3.5	98.8
	28.00	1	1.2	1.2	100.0
	Total	85	100.0	100.0	
Total		85	100.0		

Table 5d.-- Frequencies of scores on the clinical time subscale-(all APNs)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3.00	2	2.4	2.4	2.4
	5.00	1	1.2	1.2	3.5
	6.00	1	1.2	1.2	4.7
	7.00	10	11.8	11.8	16.5
	8.00	5	5.9	5.9	22.4
	9.00	8	9.4	9.4	31.8
	10.00	11	12.9	12.9	44.7
	11.00	12	14.1	14.1	58.8
	12.00	17	20.0	20.0	78.8
	13.00	8	9.4	9.4	88.2
	14.00	5	5.9	5.9	94.1
	15.00	5	5.9	5.9	100.0
	Total	85	100.0	100.0	
Total		85	100.0		

Table 5e.-- Frequencies of scores on the support staff subscale-(all APNs)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3.00	2	2.4	2.4	2.4
	4.00	1	1.2	1.2	3.5
	5.00	3	3.5	3.5	7.1
	6.00	2	2.4	2.4	9.4
	7.00	5	5.9	5.9	15.3
	8.00	8	9.4	9.4	24.7
	9.00	13	15.3	15.3	40.0
	10.00	14	16.5	16.5	56.5
	11.00	9	10.6	10.6	67.1
	12.00	15	17.6	17.6	84.7
	13.00	8	9.4	9.4	94.1
	14.00	2	2.4	2.4	96.5
	15.00	3	3.5	3.5	100.0
	Total	85	100.0	100.0	
Total		85	100.0		

Table 5f.-- Frequencies of scores on rewards subscales-(all APNs)

		Frequency	Percent	Valid Percent
Valid	2.00	5	5.9	5.9
	3.00	2	2.4	2.4
	4.00	8	9.4	9.4
	5.00	9	10.6	10.6
	6.00	15	17.6	17.6
	7.00	10	11.8	11.8
	8.00	24	28.2	28.2
	9.00	2	2.4	2.4
	10.00	10	11.8	11.8
	Total	85	100.0	100.0
Total		85	100.0	

Table 5g.--Frequencies of scores on personal time subscale-(all APNs)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	3	3.5	3.5	3.5
	2.00	10	11.8	11.8	15.3
	3.00	12	14.1	14.1	29.4
	4.00	17	20.0	20.0	49.4
	5.00	10	11.8	11.8	61.2
	6.00	14	16.5	16.5	77.6
	7.00	11	12.9	12.9	90.6
	8.00	2	2.4	2.4	92.9
	9.00	4	4.7	4.7	97.6
	10.00	2	2.4	2.4	100.0
	Total	85	100.0	100.0	
Total		85	100.0		

Table 6a.--Descriptive statistics for satisfaction subscores - (Army APNs only)

	N							
	Valid	Missing	Mean	Median	Mode	Std. Deviation	Variance	Range
OVERSAT	61	0	22.4426	23.0000	24.00	3.9980	15.9842	21.00
QOFCARE	61	0	20.8525	21.0000	19.00	3.2241	10.3945	15.00
TIMECLIN	61	0	10.4098	11.0000	12.00	2.3971	5.7459	12.00
SUPSTAFF	61	0	10.3443	10.0000	12.00	2.3230	5.3962	11.00
REWARD	61	0	6.9016	8.0000	8.00	2.0793	4.3235	8.00
TIMEPERS	61	0	4.9344	5.0000	4.00	2.1823	4.7623	9.00

Table 6b.--Frequencies of scores on the subscale of overall satisfaction - (Army APNs only)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	9.00	1	1.6	1.6	1.6
	14.00	3	4.9	4.9	6.6
	16.00	1	1.6	1.6	8.2
	17.00	1	1.6	1.6	9.8
	18.00	2	3.3	3.3	13.1
	19.00	4	6.6	6.6	19.7
	20.00	6	9.8	9.8	29.5
	21.00	2	3.3	3.3	32.8
	22.00	7	11.5	11.5	44.3
	23.00	5	8.2	8.2	52.5
	24.00	9	14.8	14.8	67.2
	25.00	7	11.5	11.5	78.7
	26.00	8	13.1	13.1	91.8
	27.00	1	1.6	1.6	93.4
	28.00	1	1.6	1.6	95.1
	29.00	2	3.3	3.3	98.4
	30.00	1	1.6	1.6	100.0
	Total	61	100.0	100.0	
Total		61	100.0		

Table 6c.--Frequencies of scores on the quality of care subscale - (Army APNs only)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	13.00	1	1.6	1.6	1.6
	14.00	1	1.6	1.6	3.3
	15.00	1	1.6	1.6	4.9
	16.00	2	3.3	3.3	8.2
	17.00	4	6.6	6.6	14.8
	18.00	4	6.6	6.6	21.3
	19.00	9	14.8	14.8	36.1
	20.00	6	9.8	9.8	45.9
	21.00	8	13.1	13.1	59.0
	22.00	6	9.8	9.8	68.9
	23.00	5	8.2	8.2	77.0
	24.00	4	6.6	6.6	83.6
	25.00	7	11.5	11.5	95.1
	26.00	1	1.6	1.6	96.7
	27.00	1	1.6	1.6	98.4
	28.00	1	1.6	1.6	100.0
	Total	61	100.0	100.0	
Total		61	100.0		

Table 6d.--Frequencies of scores on the clinical time subscale -(Army APNs only)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3.00	1	1.6	1.6	1.6
	7.00	8	13.1	13.1	14.8
	8.00	5	8.2	8.2	23.0
	9.00	7	11.5	11.5	34.4
	10.00	8	13.1	13.1	47.5
	11.00	8	13.1	13.1	60.7
	12.00	14	23.0	23.0	83.6
	13.00	5	8.2	8.2	91.8
	14.00	3	4.9	4.9	96.7
	15.00	2	3.3	3.3	100.0
	Total	61	100.0	100.0	
Total		61	100.0		

Table 6e.--Frequencies of scores on the support staff subscale -(Army APNs only)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4.00	1	1.6	1.6	1.6
	5.00	1	1.6	1.6	3.3
	6.00	1	1.6	1.6	4.9
	7.00	3	4.9	4.9	9.8
	8.00	6	9.8	9.8	19.7
	9.00	9	14.8	14.8	34.4
	10.00	11	18.0	18.0	52.5
	11.00	8	13.1	13.1	65.6
	12.00	13	21.3	21.3	86.9
	13.00	3	4.9	4.9	91.8
	14.00	2	3.3	3.3	95.1
	15.00	3	4.9	4.9	100.0
	Total	61	100.0	100.0	
Total		61	100.0		

Table 6f.--Frequencies of scores on rewards subscale - (Army APNs only)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2.00	2	3.3	3.3	3.3
	3.00	1	1.6	1.6	4.9
	4.00	7	11.5	11.5	16.4
	5.00	5	8.2	8.2	24.6
	6.00	10	16.4	16.4	41.0
	7.00	5	8.2	8.2	49.2
	8.00	21	34.4	34.4	83.6
	9.00	2	3.3	3.3	86.9
	10.00	8	13.1	13.1	100.0
	Total	61	100.0	100.0	
Total		61	100.0		

Table 6g.--Frequencies of scores on personal time subscale-(Army APNs only)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	3	4.9	4.9	4.9
	2.00	5	8.2	8.2	13.1
	3.00	9	14.8	14.8	27.9
	4.00	11	18.0	18.0	45.9
	5.00	8	13.1	13.1	59.0
	6.00	10	16.4	16.4	75.4
	7.00	9	14.8	14.8	90.2
	8.00	2	3.3	3.3	93.4
	9.00	2	3.3	3.3	96.7
	10.00	2	3.3	3.3	100.0
	Total	61	100.0	100.0	
Total		61	100.0		

Table 7a.--Descriptive statistics for autonomy and collaboration scales- (all APNs)

	N							
	Valid	Missing	Mean	Median	Mode	Std. Deviation	Variance	Range
TOTAUTON	85	0	121.0353	121.0000	115.00	11.4740	131.6535	53.00
PCOLAB	85	0	77.0471	80.0000	80.00[a]	15.5876	242.9739	62.00

a. Multiple modes exist. The smallest value is shown

Table 7b.--Frequencies of scores on autonomy scale -(all APNs)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	88.00	1	1.2	1.2	1.2
	93.00	1	1.2	1.2	2.4
	98.00	1	1.2	1.2	3.5
	100.00	2	2.4	2.4	5.9
	104.00	3	3.5	3.5	9.4
	106.00	2	2.4	2.4	11.8
	107.00	1	1.2	1.2	12.9
	109.00	1	1.2	1.2	14.1
	110.00	1	1.2	1.2	15.3
	111.00	2	2.4	2.4	17.6
	112.00	1	1.2	1.2	18.8
	114.00	5	5.9	5.9	24.7
	115.00	6	7.1	7.1	31.8
	116.00	3	3.5	3.5	35.3
	117.00	5	5.9	5.9	41.2
	118.00	2	2.4	2.4	43.5
	119.00	3	3.5	3.5	47.1
	120.00	1	1.2	1.2	48.2
	121.00	2	2.4	2.4	50.6
	122.00	2	2.4	2.4	52.9
	123.00	4	4.7	4.7	57.6
	124.00	3	3.5	3.5	61.2
	125.00	2	2.4	2.4	63.5
	126.00	1	1.2	1.2	64.7
	127.00	4	4.7	4.7	69.4
	128.00	3	3.5	3.5	72.9
	129.00	1	1.2	1.2	74.1
	130.00	5	5.9	5.9	80.0
	134.00	2	2.4	2.4	82.4
	135.00	5	5.9	5.9	88.2
	136.00	3	3.5	3.5	91.8
	137.00	3	3.5	3.5	95.3
	139.00	1	1.2	1.2	96.5
	140.00	2	2.4	2.4	98.8
	141.00	1	1.2	1.2	100.0
	Total	85	100.0	100.0	
Total		85	100.0		

Table 7c.--Frequencies of scores on collaboration scale - (all APNs)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	38.00	1	1.2	1.2	1.2
	40.00	2	2.4	2.4	3.5
	41.00	1	1.2	1.2	4.7
	46.00	1	1.2	1.2	5.9
	49.00	2	2.4	2.4	8.2
	53.00	1	1.2	1.2	9.4
	54.00	2	2.4	2.4	11.8
	57.00	1	1.2	1.2	12.9
	60.00	1	1.2	1.2	14.1
	61.00	2	2.4	2.4	16.5
	62.00	1	1.2	1.2	17.6
	63.00	1	1.2	1.2	18.8
	65.00	1	1.2	1.2	20.0
	67.00	1	1.2	1.2	21.2
	68.00	1	1.2	1.2	22.4
	69.00	1	1.2	1.2	23.5
	70.00	1	1.2	1.2	24.7
	71.00	2	2.4	2.4	27.1
	72.00	5	5.9	5.9	32.9
	74.00	6	7.1	7.1	40.0
	75.00	1	1.2	1.2	41.2
	76.00	3	3.5	3.5	44.7
	78.00	1	1.2	1.2	45.9
	79.00	2	2.4	2.4	48.2
	80.00	7	8.2	8.2	56.5
	81.00	7	8.2	8.2	64.7
	82.00	2	2.4	2.4	67.1
	83.00	1	1.2	1.2	68.2
	84.00	1	1.2	1.2	69.4
	85.00	1	1.2	1.2	70.6
	86.00	1	1.2	1.2	71.8
	87.00	2	2.4	2.4	74.1
	88.00	3	3.5	3.5	77.6
	89.00	1	1.2	1.2	78.8
	90.00	2	2.4	2.4	81.2
	92.00	1	1.2	1.2	82.4
	94.00	3	3.5	3.5	85.9
	98.00	5	5.9	5.9	91.8
	99.00	3	3.5	3.5	95.3
	100.00	4	4.7	4.7	100.0
	Total	85	100.0	100.0	
Total		85	100.0		

Table 8a.--Descriptive statistics for autonomy and satisfaction scales -(Army APNs only)

	N							
	Valid	Missing	Mean	Median	Mode	Std. Deviation	Variance	Range
TOTAUTON	61	0	122.7049	123.0000	117.00	10.4632	109.4781	48.00
PCOLAB	61	0	76.5410	79.0000	80.00	15.9191	253.4191	60.00

Table 8b.--Frequencies of scores on autonomy scale -(Army APNs only)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	93.00	1	1.6	1.6	1.6
	100.00	1	1.6	1.6	3.3
	104.00	2	3.3	3.3	6.6
	106.00	1	1.6	1.6	8.2
	107.00	1	1.6	1.6	9.8
	111.00	1	1.6	1.6	11.5
	112.00	1	1.6	1.6	13.1
	114.00	3	4.9	4.9	18.0
	115.00	2	3.3	3.3	21.3
	116.00	2	3.3	3.3	24.6
	117.00	5	8.2	8.2	32.8
	118.00	2	3.3	3.3	36.1
	119.00	3	4.9	4.9	41.0
	121.00	2	3.3	3.3	44.3
	122.00	2	3.3	3.3	47.5
	123.00	3	4.9	4.9	52.5
	124.00	2	3.3	3.3	55.7
	125.00	2	3.3	3.3	59.0
	126.00	1	1.6	1.6	60.7
	127.00	4	6.6	6.6	67.2
	128.00	3	4.9	4.9	72.1
	129.00	1	1.6	1.6	73.8
	130.00	4	6.6	6.6	80.3
	134.00	1	1.6	1.6	82.0
	135.00	2	3.3	3.3	85.2
	136.00	3	4.9	4.9	90.2
	137.00	2	3.3	3.3	93.4
	139.00	1	1.6	1.6	95.1
	140.00	2	3.3	3.3	98.4
	141.00	1	1.6	1.6	100.0
	Total	61	100.0	100.0	
Total		61	100.0		

Table 8c.-- Frequencies of scores on collaboration scale - (Army APNs only)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	40.00	2	3.3	3.3	3.3
	41.00	1	1.6	1.6	4.9
	46.00	1	1.6	1.6	6.6
	49.00	1	1.6	1.6	8.2
	53.00	1	1.6	1.6	9.8
	54.00	2	3.3	3.3	13.1
	57.00	1	1.6	1.6	14.8
	60.00	1	1.6	1.6	16.4
	61.00	2	3.3	3.3	19.7
	63.00	1	1.6	1.6	21.3
	67.00	1	1.6	1.6	23.0
	68.00	1	1.6	1.6	24.6
	69.00	1	1.6	1.6	26.2
	70.00	1	1.6	1.6	27.9
	71.00	1	1.6	1.6	29.5
	72.00	1	1.6	1.6	31.1
	74.00	5	8.2	8.2	39.3
	75.00	1	1.6	1.6	41.0
	76.00	3	4.9	4.9	45.9
	78.00	1	1.6	1.6	47.5
	79.00	2	3.3	3.3	50.8
	80.00	6	9.8	9.8	60.7
	81.00	4	6.6	6.6	67.2
	82.00	1	1.6	1.6	68.9
	83.00	1	1.6	1.6	70.5
	84.00	1	1.6	1.6	72.1
	87.00	1	1.6	1.6	73.8
	88.00	2	3.3	3.3	77.0
	89.00	1	1.6	1.6	78.7
	90.00	2	3.3	3.3	82.0
	94.00	2	3.3	3.3	85.2
	98.00	3	4.9	4.9	90.2
	99.00	3	4.9	4.9	95.1
	100.00	3	4.9	4.9	100.0
	Total	61	100.0	100.0	
Total		61	100.0		

APPENDIX H
MAJOR TASKS AND RESPONSIBILITIES

Table 1.-- Have inpatient caseload-(certified registered nurse anesthetists)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	9	39.1	39.1	39.1
	1.00 yes	14	60.9	60.9	100.0
	Total	23	100.0	100.0	
Total		23	100.0		

Table 2.--Have outpatient caseload-(certified registered nurse anesthetists)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	15	65.2	65.2	65.2
	1.00 yes	8	34.8	34.8	100.0
	Total	23	100.0	100.0	
Total		23	100.0		

Table 3.-- Function as case manager-(certified registered nurse anesthetists)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	23	100.0	100.0	100.0
	Total	23	100.0	100.0	
Total		23	100.0		

Table 4.-- Provide consultation to other nurses-(certified registered nurse anesthetists)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	2	8.7	8.7	8.7
	1.00 yes	21	91.3	91.3	100.0
	Total	23	100.0	100.0	
Total		23	100.0		

Table 5.-- Provide consultation to non-nurses-(certified registered nurse anesthetists)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	8	34.8	34.8	34.8
	1.00 yes	15	65.2	65.2	100.0
	Total	23	100.0	100.0	
Total		23	100.0		

Table 6.-- Prescriptive authority by protocol-(certified registered nurse anesthetists)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	14	60.9	60.9	60.9
	1.00 yes	9	39.1	39.1	100.0
	Total	23	100.0	100.0	
Total		23	100.0		

Table 7.-- Prescriptive authority by med list-(certified registered nurse anesthetists)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	5	21.7	21.7	21.7
	1.00 yes	18	78.3	78.3	100.0
	Total	23	100.0	100.0	
Total		23	100.0		

Table 8.-- Inpatient admitting privileges-(certified registered nurse anesthetists)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	23	100.0	100.0	100.0
	Total	23	100.0	100.0	
Total		23	100.0		

Table 9.-- Clinical supervision of paraprofessionals/enlisted-(certified registered nurse anesthetists)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00 yes	8	34.8	34.8	34.8
	2.00	14	60.9	60.9	95.7
	4.00	1	4.3	4.3	100.0
	Total	23	100.0	100.0	
Total		23	100.0		

Table 10.-- Administrative supervision of paraprofessionals/enlisted-(certified registered nurse anesthetists)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	15	65.2	65.2	65.2
	1.00 yes	8	34.8	34.8	100.0
	Total	23	100.0	100.0	
Total		23	100.0		

Table 11.-- Clinical supervision of other RNs-(certified registered nurse anesthetists)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	19	82.6	82.6	82.6
	1.00 yes	4	17.4	17.4	100.0
	Total	23	100.0	100.0	
Total		23	100.0		

Table 12.-- Administrative supervision of RNs-(certified registered nurse anesthetists)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	19	82.6	82.6	82.6
	1.00 yes	4	17.4	17.4	100.0
	Total	23	100.0	100.0	
Total		23	100.0		

Table 13.-- Clinical supervision of other APNs-(certified registered nurse anesthetists)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	15	65.2	65.2	65.2
	1.00 yes	8	34.8	34.8	100.0
	Total	23	100.0	100.0	
Total		23	100.0		

Table 14.-- Administrative supervision of other APNs-(certified registered nurse anesthetists)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	14	60.9	60.9	60.9
	1.00 yes	9	39.1	39.1	100.0
	Total	23	100.0	100.0	
Total		23	100.0		

Table 15.-- Clinical supervision of other healthcare providers-(certified registered nurse anesthetists)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	18	78.3	78.3	78.3
	1.00 yes	5	21.7	21.7	100.0
	Total	23	100.0	100.0	
Total		23	100.0		

Table 16.-- Administrative supervision of other healthcare providers-(certified registered nurse anesthetists)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	18	78.3	78.3	78.3
	1.00 yes	5	21.7	21.7	100.0
	Total	23	100.0	100.0	
Total		23	100.0		

Table 17.-- Authorized to order diagnostic tests-(certified registered nurse anesthetists)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	2	8.7	8.7	8.7
	1.00 yes	21	91.3	91.3	100.0
	Total	23	100.0	100.0	
Total		23	100.0		

Table 18.-- Individual patient teaching-(certified registered nurse anesthetists)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	5	21.7	21.7	21.7
	1.00 yes	18	78.3	78.3	100.0
	Total	23	100.0	100.0	
Total		23	100.0		

Table 19.-- Patient teaching in groups-(certified registered nurse anesthetists)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	16	69.6	69.6	69.6
	1.00 yes	7	30.4	30.4	100.0
	Total	23	100.0	100.0	
Total		23	100.0		

Table 20.-- Lead support groups-(certified registered nurse anesthetists)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	23	100.0	100.0	100.0
	Total	23	100.0	100.0	
Total		23	100.0		

Table 21.--Use clinical pathways or caremaps-(certified registered nurse anesthetists)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	23	100.0	100.0	100.0
	Total	23	100.0	100.0	
Total		23	100.0		

Table 22.-- Use treatment protocols or algorithms-(certified registered nurse anesthetists)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	16	69.6	69.6	69.6
	1.00 yes	7	30.4	30.4	100.0
	Total	23	100.0	100.0	
Total		23	100.0		

Table 23.-- Administrative duties for department of nursing-(certified registered nurse anesthetists)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	21	91.3	91.3	91.3
	1.00 yes	2	8.7	8.7	100.0
	Total	23	100.0	100.0	
Total		23	100.0		

Table 24.-- Administrative duties outside of nursing-(certified registered nurse anesthetists)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	20	87.0	87.0	87.0
	1.00 yes	3	13.0	13.0	100.0
	Total	23	100.0	100.0	
Total		23	100.0		

Table 25.-- Other major responsibilities not previously listed-(certified registered nurse anesthetists)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	16	69.6	69.6	69.6
	1.00 yes	7	30.4	30.4	100.0
	Total	23	100.0	100.0	
Total		23	100.0		

Table 26.--Have inpatient case load - (community health nurses)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	22	91.7	91.7	91.7
	1.00 yes	2	8.3	8.3	100.0
	Total	24	100.0	100.0	
Total		24	100.0		

Table 27.--Have outpatient caseload- (community health nurses)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	2	8.3	8.3	8.3
	1.00 yes	22	91.7	91.7	100.0
	Total	24	100.0	100.0	
Total		24	100.0		

Table 28.-- Function as case manager- (community health nurses)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	8	33.3	33.3	33.3
	1.00 yes	16	66.7	66.7	100.0
	Total	24	100.0	100.0	
Total		24	100.0		

Table 29.-- Provide consultation to other nurses-(community health nurses)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	2	8.3	8.3	8.3
	1.00 yes	22	91.7	91.7	100.0
	Total	24	100.0	100.0	
Total		24	100.0		

Table 30.-- Provide consultation to non-nurses-(community health nurses)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	2	8.3	8.3	8.3
	1.00 yes	22	91.7	91.7	100.0
	Total	24	100.0	100.0	
Total		24	100.0		

Table 31.-- Prescriptive authority by protocol-(community health nurses)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	11	45.8	45.8	45.8
	1.00 yes	13	54.2	54.2	100.0
	Total	24	100.0	100.0	
Total		24	100.0		

Table 32.-- Prescriptive authority by med list-(community health nurses)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	11	45.8	45.8	45.8
	1.00 yes	13	54.2	54.2	100.0
	Total	24	100.0	100.0	
Total		24	100.0		

Table 33.-- Inpatient admitting privileges-(community health nurses)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	24	100.0	100.0	100.0
	Total	24	100.0	100.0	
Total		24	100.0		

Table 34.-- Clinical supervision of paraprofessionals/enlisted-(community health nurses)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00 yes	5	20.8	20.8	20.8
	2.00	18	75.0	75.0	95.8
	3.00	1	4.2	4.2	100.0
	Total	24	100.0	100.0	
Total		24	100.0		

Table 35.-- Administrative supervision of paraprofessionals/enlisted-(community health nurses)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	13	54.2	54.2	54.2
	1.00 yes	11	45.8	45.8	100.0
	Total	24	100.0	100.0	
Total		24	100.0		

Table 36.-- Clinical supervision of other RNs-(community health nurses)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	17	70.8	70.8	70.8
	1.00 yes	7	29.2	29.2	100.0
	Total	24	100.0	100.0	
Total		24	100.0		

Table 37.-- Administrative supervision of RNs-(community health nurses)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	15	62.5	62.5	62.5
	1.00 yes	9	37.5	37.5	100.0
	Total	24	100.0	100.0	
Total		24	100.0		

Table 38.-- Clinical supervision of other APNs-(community health nurses)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	16	66.7	66.7	66.7
	1.00 yes	8	33.3	33.3	100.0
	Total	24	100.0	100.0	
Total		24	100.0		

Table 39.-- Administrative supervision of other APNs-(community health nurses)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	17	70.8	70.8	70.8
	1.00 yes	7	29.2	29.2	100.0
	Total	24	100.0	100.0	
Total		24	100.0		

Table 40.-- Clinical supervision of other healthcare providers-(community health nurses)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	21	87.5	87.5	87.5
	1.00 yes	3	12.5	12.5	100.0
	Total	24	100.0	100.0	
Total		24	100.0		

Table 41.-- Administrative supervision of other healthcare providers-(community health nurses)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	20	83.3	83.3	83.3
	1.00 yes	4	16.7	16.7	100.0
	Total	24	100.0	100.0	
Total		24	100.0		

Table 42.-- Authorized to order diagnostic tests-(community health nurses)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	1	4.2	4.2	4.2
	1.00 yes	23	95.8	95.8	100.0
	Total	24	100.0	100.0	
Total		24	100.0		

Table 43.-- Individual patient teaching-(community health nurses)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	1	4.2	4.2	4.2
	1.00 yes	23	95.8	95.8	100.0
	Total	24	100.0	100.0	
Total		24	100.0		

Table 44.-- Patient teaching in groups-(community health nurses)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00 yes	24	100.0	100.0	100.0
	Total	24	100.0	100.0	
Total		24	100.0		

Table 45.--Lead support groups-(community health nurses)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	12	50.0	50.0	50.0
	1.00 yes	12	50.0	50.0	100.0
	Total	24	100.0	100.0	
Total		24	100.0		

Table 46.-- Use clinical pathways or caremaps-(community health nurses)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	19	79.2	79.2	79.2
	1.00 yes	5	20.8	20.8	100.0
	Total	24	100.0	100.0	
Total		24	100.0		

Table 47.-- Use treatment protocols or algorithms-(community health nurses)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	14	58.3	58.3	58.3
	1.00 yes	10	41.7	41.7	100.0
	Total	24	100.0	100.0	
Total		24	100.0		

Table 48.-- Administrative duties for department of nursing-(community health nurses)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	23	95.8	95.8	95.8
	1.00 yes	1	4.2	4.2	100.0
	Total	24	100.0	100.0	
Total		24	100.0		

Table 49.-- Administrative duties outside of nursing-(community health nurses)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	23	95.8	95.8	95.8
	1.00 yes	1	4.2	4.2	100.0
	Total	24	100.0	100.0	
Total		24	100.0		

Table 50.-- Other major responsibilities not previously listed-(community health nurses)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	17	70.8	70.8	70.8
	1.00 yes	7	29.2	29.2	100.0
	Total	24	100.0	100.0	
Total		24	100.0		

Table 51.--Have inpatient caseload - (combined category of nurse practitioners, clinical nurse specialists, and certified nurse midwives)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	27	73.0	73.0	73.0
	1.00 yes	10	27.0	27.0	100.0
	Total	37	100.0	100.0	
Total		37	100.0		

Table 52.--Have outpatient caseload -(combined category of nurse practitioners, clinical nurse specialists, and certified nurse midwives)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	7	18.9	18.9	18.9
	1.00 yes	30	81.1	81.1	100.0
	Total	37	100.0	100.0	
Total		37	100.0		

Table 53.-- Function as case manager -(combined category of nurse practitioners, clinical nurse specialists, and certified nurse midwives)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	23	62.2	62.2	62.2
	1.00 yes	14	37.8	37.8	100.0
	Total	37	100.0	100.0	
Total		37	100.0		

Table 54.-- Provide consultation to other nurses -(combined category of nurse practitioners, clinical nurse specialists, and certified nurse midwives)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	14	37.8	37.8	37.8
	1.00 yes	23	62.2	62.2	100.0
	Total	37	100.0	100.0	
Total		37	100.0		

Table 55.-- Provide consultation to non-nurses - (combined category of nurse practitioners, clinical nurse specialists, and certified nurse midwives)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	19	51.4	51.4	51.4
	1.00 yes	18	48.6	48.6	100.0
	Total	37	100.0	100.0	
Total		37	100.0		

Table 56.-- Prescriptive authority by protocol - (combined category of nurse practitioners, clinical nurse specialists, and certified nurse midwives)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	17	45.9	45.9	45.9
	1.00 yes	20	54.1	54.1	100.0
	Total	37	100.0	100.0	
Total		37	100.0		

Table 57.-- Prescriptive authority by med list - (combined category of nurse practitioners, clinical nurse specialists, and certified nurse midwives)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	9	24.3	24.3	24.3
	1.00 yes	28	75.7	75.7	100.0
	Total	37	100.0	100.0	
Total		37	100.0		

Table 58.-- Inpatient admitting privileges -(combined category of nurse practitioners, clinical nurse specialists, and certified nurse midwives)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	34	91.9	91.9	91.9
	1.00 yes	3	8.1	8.1	100.0
	Total	37	100.0	100.0	
Total		37	100.0		

Table 59.-- Clinical supervision of paraprofessionals/enlisted - (combined category of nurse practitioners, clinical nurse specialists, and certified nurse midwives)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00 yes	24	64.9	64.9	64.9
	2.00	11	29.7	29.7	94.6
	3.00	2	5.4	5.4	100.0
	Total	37	100.0	100.0	
Total		37	100.0		

Table 60.-- Administrative supervision of paraprofessionals/enlisted - (combined category of nurse practitioners, clinical nurse specialists, and certified nurse midwives)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	25	67.6	67.6	67.6
	1.00 yes	12	32.4	32.4	100.0
	Total	37	100.0	100.0	
Total		37	100.0		

Table 61.-- Clinical supervision of other RNs - (combined category of nurse practitioners, clinical nurse specialists, and certified nurse midwives)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	29	78.4	78.4	78.4
	1.00 yes	8	21.6	21.6	100.0
	Total	37	100.0	100.0	
Total		37	100.0		

Table 51.--Have inpatient caseload - (combined category of nurse practitioners, clinical nurse specialists, and certified nurse midwives)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	27	73.0	73.0	73.0
	1.00 yes	10	27.0	27.0	100.0
	Total	37	100.0	100.0	
Total		37	100.0		

Table 52.--Have outpatient caseload -(combined category of nurse practitioners, clinical nurse specialists, and certified nurse midwives)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	7	18.9	18.9	18.9
	1.00 yes	30	81.1	81.1	100.0
	Total	37	100.0	100.0	
Total		37	100.0		

Table 53.-- Function as case manager -(combined category of nurse practitioners, clinical nurse specialists, and certified nurse midwives)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	23	62.2	62.2	62.2
	1.00 yes	14	37.8	37.8	100.0
	Total	37	100.0	100.0	
Total		37	100.0		

Table 54.-- Provide consultation to other nurses -(combined category of nurse practitioners, clinical nurse specialists, and certified nurse midwives)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	14	37.8	37.8	37.8
	1.00 yes	23	62.2	62.2	100.0
	Total	37	100.0	100.0	
Total		37	100.0		

Table 55.-- Provide consultation to non-nurses - (combined category of nurse practitioners, clinical nurse specialists, and certified nurse midwives)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	19	51.4	51.4	51.4
	1.00 yes	18	48.6	48.6	100.0
	Total	37	100.0	100.0	
Total		37	100.0		

Table 56.-- Prescriptive authority by protocol - (combined category of nurse practitioners, clinical nurse specialists, and certified nurse midwives)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	17	45.9	45.9	45.9
	1.00 yes	20	54.1	54.1	100.0
	Total	37	100.0	100.0	
Total		37	100.0		

Table 57.-- Prescriptive authority by med list - (combined category of nurse practitioners, clinical nurse specialists, and certified nurse midwives)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	9	24.3	24.3	24.3
	1.00 yes	28	75.7	75.7	100.0
	Total	37	100.0	100.0	
Total		37	100.0		

Table 58.-- Inpatient admitting privileges -(combined category of nurse practitioners, clinical nurse specialists, and certified nurse midwives)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	34	91.9	91.9	91.9
	1.00 yes	3	8.1	8.1	100.0
	Total	37	100.0	100.0	
Total		37	100.0		

Table 59.-- Clinical supervision of paraprofessionals/enlisted - (combined category of nurse practitioners, clinical nurse specialists, and certified nurse midwives)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00 yes	24	64.9	64.9	64.9
	2.00	11	29.7	29.7	94.6
	3.00	2	5.4	5.4	100.0
	Total	37	100.0	100.0	
Total		37	100.0		

Table 60.-- Administrative supervision of paraprofessionals/enlisted - (combined category of nurse practitioners, clinical nurse specialists, and certified nurse midwives)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	25	67.6	67.6	67.6
	1.00 yes	12	32.4	32.4	100.0
	Total	37	100.0	100.0	
Total		37	100.0		

Table 62.-- Administrative supervision of RNs - (combined category of nurse practitioners, clinical nurse specialists, and certified nurse midwives)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	29	78.4	78.4	78.4
	1.00 yes	8	21.6	21.6	100.0
	Total	37	100.0	100.0	
Total		37	100.0		

Table 63.-- Clinical supervision of other APNs - (combined category of nurse practitioners, clinical nurse specialists, and certified nurse midwives)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	34	91.9	91.9	91.9
	1.00 yes	3	8.1	8.1	100.0
	Total	37	100.0	100.0	
Total		37	100.0		

Table 64.-- Administrative supervision of other APNs - (combined category of nurse practitioners, clinical nurse specialists, and certified nurse midwives)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	34	91.9	91.9	91.9
	1.00 yes	3	8.1	8.1	100.0
	Total	37	100.0	100.0	
Total		37	100.0		

Table 65.-- Clinical supervision of other healthcare providers-(combined category of nurse practitioners, clinical nurse specialists, and certified nurse midwives)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	34	91.9	91.9	91.9
	1.00 yes	3	8.1	8.1	100.0
	Total	37	100.0	100.0	
Total		37	100.0		

Table 66.-- Administrative supervision of other healthcare providers - (combined category of nurse practitioners, clinical nurse specialists, and certified nurse midwives)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	31	83.8	83.8	83.8
	1.00 yes	6	16.2	16.2	100.0
	Total	37	100.0	100.0	
Total		37	100.0		

Table 67.-- Authorized to order diagnostic tests - (combined category of nurse practitioners, clinical nurse specialists, and certified nurse midwives)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	6	16.2	16.2	16.2
	1.00 yes	31	83.8	83.8	100.0
	Total	37	100.0	100.0	
Total		37	100.0		

Table 68.-- Individual patient teaching - (combined category of nurse practitioners, clinical nurse specialists, and certified nurse midwives)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	5	13.5	13.5	13.5
	1.00 yes	32	86.5	86.5	100.0
	Total	37	100.0	100.0	
Total		37	100.0		

Table 69.-- Patient teaching in groups - (combined category of nurse practitioners, clinical nurse specialists, and certified nurse midwives)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	12	32.4	32.4	32.4
	1.00 yes	25	67.6	67.6	100.0
	Total	37	100.0	100.0	
Total		37	100.0		

Table 70.--Lead support groups - (combined category of nurse practitioners, clinical nurse specialists, and certified nurse midwives)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	29	78.4	78.4	78.4
	1.00 yes	8	21.6	21.6	100.0
	Total	37	100.0	100.0	
Total		37	100.0		

Table 71.-- Use clinical pathways or caremaps - (combined category of nurse practitioners, clinical nurse specialists, and certified nurse midwives)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	28	75.7	75.7	75.7
	1.00 yes	9	24.3	24.3	100.0
	Total	37	100.0	100.0	
Total		37	100.0		

Table 72.-- Use treatment protocols or algorithms -(combined category of nurse practitioners, clinical nurse specialists, and certified nurse midwives)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	13	35.1	35.1	35.1
	1.00 yes	24	64.9	64.9	100.0
	Total	37	100.0	100.0	
Total		37	100.0		

Table 73.-- Administrative duties for department of nursing - (combined category of nurse practitioners, clinical nurse specialists, and certified nurse midwives)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	18	48.6	48.6	48.6
	1.00 yes	19	51.4	51.4	100.0
	Total	37	100.0	100.0	
Total		37	100.0		

Table 74.-- Administrative duties outside of nursing - (combined category of nurse practitioners, clinical nurse specialists, and certified nurse midwives)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	35	94.6	94.6	94.6
	1.00 yes	2	5.4	5.4	100.0
	Total	37	100.0	100.0	
Total		37	100.0		

Table 75.-- Other major responsibilities not previously listed - (combined category of nurse practitioners, clinical nurse specialists, and certified nurse midwives)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00 no	26	70.3	70.3	70.3
	1.00 yes	11	29.7	29.7	100.0
	Total	37	100.0	100.0	
Total		37	100.0		

APPENDIX I
HYPOTHESIS TESTING USING REGRESSION (ALL APNs)

Hypothesis 1 - Regression (Stepwise)

Table 1a. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.420[a]	.176	.165	1.1088

a. Predictors: (Constant), REWARD

Table 1b. ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	19.738	1	19.738	16.054	.000[a]
	Residual	92.210	75	1.229		
	Total	111.948	76			

a. Predictors: (Constant), REWARD

b. Dependent Variable: STAY intention to stay in MHSS

Table 1c. Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.357	.401		5.873	.000
	REWARD	.231	.058	.420	4.007	.000

a. Dependent Variable: STAY intention to stay in MHSS

Hypothesis 1 - Regression (All Variables Entered)

Table 2a. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.473[a]	.224	.169	1.1062

a. Predictors: (Constant), TIMEPERS, REWARD, TIMECLIN, SUPSTAFF, QOFCARE

Table 2b. ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	25.069	5	5.014	4.097	.003[a]
	Residual	86.879	71	1.224		
	Total	111.948	76			

a. Predictors: (Constant), TIMEPERS, REWARD, TIMECLIN, SUPSTAFF, QOFCARE

b. Dependent Variable: STAY intention to stay in MHSS

Table 2c. Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.565	.795		1.969	.053
	QOFCARE	-2.98E-02	.048	-.086	-.618	.539
	TIMECLIN	8.983E-02	.057	.194	1.587	.117
	SUPSTAFF	5.376E-02	.055	.118	.975	.333
	REWARD	.196	.064	.357	3.086	.003
	TIMEPERS	3.408E-02	.067	.059	.506	.614

a. Dependent Variable: STAY intention to stay in MHSS

Hypothesis 2 - Regression (Stepwise)

Table 3a. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.653[a]	.427	.420	3.2390
2	.723[b]	.523	.512	2.9719

a. Predictors: (Constant), QOFCARE

b. Predictors: (Constant), QOFCARE, SUPSTAFF

Table 3b. ANOVA[c]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	648.925	1	648.925	61.854	.000[a]
	Residual	870.770	83	10.491		
	Total	1519.694	84			
2	Regression	795.435	2	397.718	45.029	.000[b]
	Residual	724.259	82	8.832		
	Total	1519.694	84			

a. Predictors: (Constant), QOFCARE

b. Predictors: (Constant), QOFCARE, SUPSTAFF

c. Dependent Variable: OVERSAT

Table 3c. Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	5.571	2.098		2.656	.009
	QOFCARE	.792	.101	.653	7.865	.000
2	(Constant)	3.871	1.969		1.965	.053
	QOFCARE	.600	.104	.495	5.787	.000
	SUPSTAFF	.565	.139	.348	4.073	.000

a. Dependent Variable: OVERSAT

Hypothesis 2 - Regression (all variables entered)

Table 4a. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.726[a]	.526	.497	3.0181

a. Predictors: (Constant), TIMEPERS, REWARD, TIMECLIN, SUPSTAFF, QOFCARE

Table 4b. ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	800.105	5	160.021	17.568	.000[a]
	Residual	719.589	79	9.109		
	Total	1519.694	84			

a. Predictors: (Constant), TIMEPERS, REWARD, TIMECLIN, SUPSTAFF, QOFCARE

b. Dependent Variable: OVERSAT

Table 4c. Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.689	2.067		1.785	.078
	QOFCARE	.601	.125	.496	4.820	.000
	TIMECLIN	-2.05E-02	.148	-.013	-.139	.890
	SUPSTAFF	.534	.147	.330	3.623	.001
	REWARD	.118	.169	.060	.698	.487
	TIMEPERS	-1.94E-02	.174	-.010	-.112	.911

a. Dependent Variable: OVERSAT

Hypothesis 3 - Regression (Step-wise)

Table 5a. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.467[a]	.218	.209	3.7831
2	.537[b]	.288	.271	3.6323

a. Predictors: (Constant), TOTAUTON

b. Predictors: (Constant), TOTAUTON, PCOLAB

Table 5b. ANOVA[c]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	331.780	1	331.780	23.182	.000[a]
	Residual	1187.914	83	14.312		
	Total	1519.694	84			
2	Regression	437.810	2	218.905	16.592	.000[b]
	Residual	1081.884	82	13.194		
	Total	1519.694	84			

a. Predictors: (Constant), TOTAUTON

b. Predictors: (Constant), TOTAUTON, PCOLAB

c. Dependent Variable: OVERSAT

Table 5c. Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.871	4.374		.199	.843
	TOTAUTON	.173	.036	.467	4.815	.000
2	(Constant)	-1.490	4.281		-.348	.729
	TOTAUTON	.145	.036	.391	4.033	.000
	PCOLAB	7.502E-02	.026	.275	2.835	.006

a. Dependent Variable: OVERSAT

Hypothesis 3 - Regression (All variables entered)

Table 6a. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.537[a]	.288	.271	3.6323

a. Predictors: (Constant), PCOLAB, TOTAUTON

Table 6b. ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	437.810	2	218.905	16.592	.000[a]
	Residual	1081.884	82	13.194		
	Total	1519.694	84			

a. Predictors: (Constant), PCOLAB, TOTAUTON

b. Dependent Variable: OVERSAT

Table 6c. Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1.490	4.281		-.348	.729
	TOTAUTON	.145	.036	.391	4.033	.000
	PCOLAB	7.502E-02	.026	.275	2.835	.006

a. Dependent Variable: OVERSAT

Hypothesis 4 - Regression (Step-wise)

Table 7a. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.309[a]	.096	.084	1.1618
2	.383[b]	.147	.124	1.1359

a. Predictors: (Constant), OVERSAT

b. Predictors: (Constant), OVERSAT, PCOLAB

Table 7b. ANOVA[c]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10.708	1	10.708	7.933	.006[a]
	Residual	101.240	75	1.350		
	Total	111.948	76			
2	Regression	16.462	2	8.231	6.379	.003[b]
	Residual	95.486	74	1.290		
	Total	111.948	76			

a. Predictors: (Constant), OVERSAT

b. Predictors: (Constant), OVERSAT, PCOLAB

c. Dependent Variable: STAY intention to stay in MHSS

Table 7c. Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.949	.700		2.786	.007
	OVERSAT	8.819E-02	.031	.309	2.817	.006
2	(Constant)	2.771	.787		3.521	.001
	OVERSAT	.117	.033	.410	3.490	.001
	PCOLAB	-1.89E-02	.009	-.248	-2.112	.038

a. Dependent Variable: STAY intention to stay in MHSS

Hypothesis 4 - Regression (All Variables Entered)

Table 8a. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.386[a]	.149	.114	1.1423

a. Predictors: (Constant), OVERSAT, PCOLAB, TOTAUTON

Table 8b. ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	16.701	3	5.567	4.267	.008[a]
	Residual	95.247	73	1.305		
	Total	111.948	76			

a. Predictors: (Constant), OVERSAT, PCOLAB, TOTAUTON

b. Dependent Variable: STAY intention to stay in MHSS

Table 8c. Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.269	1.416		1.602	.113
	TOTAUTON	5.672E-03	.013	.054	.427	.670
	PCOLAB	-1.92E-02	.009	-.252	-2.126	.037
	OVERSAT	.109	.038	.384	2.891	.005

a. Dependent Variable: STAY intention to stay in MHSS

APPENDIX J
FINDINGS RELATED TO SPECIFIC APN CATEGORIES

Table 1.- - Certified registered nurse anesthetists - descriptive statistics on intent to remain in AMEDD, overall satisfaction, quality of care, clinical time, support staff, rewards, personal time, total autonomy, and total collaboration scores

	N							
	Valid	Missing	Mean	Mode	Std. Deviation	Variance	Range	Median
TITLE APN Title	23	0	2.0000	2.00	.0000	.0000	.00	
STAY intention to stay in MHSS	21	2	4.1905	5.00	1.0305	1.0619	4.00	4.0000
OVERSAT	23	0	23.1739	20.00	2.7741	7.6957	10.00	24.0000
QOFCARE	23	0	21.9130	19.00	3.4101	11.6285	11.00	22.0000
TIMECLIN	23	0	11.5217	11.00	2.4656	6.0791	12.00	11.0000
SUPSTAFF	23	0	10.6087	12.00	1.4690	2.1581	6.00	11.0000
REWARD	23	0	6.3478	8.00	1.9681	3.8735	8.00	6.0000
TIMEPERS	23	0	5.6087	6.00[a]	1.8275	3.3399	8.00	6.0000
TOTAUTON	23	0	122.6522	127.00	10.0707	101.4190	42.00	123.0000
PCOLAB	23	0	80.2174	74.00[a]	13.6180	185.4506	54.00	81.0000

a. Multiple modes exist. The smallest value is shown

Table 2.-- Community health nurses - descriptive statistics on intent to remain in AMEDD, overall satisfaction, quality of care, clinical time, support staff, rewards, personal time, total autonomy, and total collaboration scores.

	N							
	Valid	Missing	Mean	Median	Mode	Std. Deviation	Variance	Range
STAY intention to stay in MHSS	23	1	4.0000	4.0000	3.00[a]	.8528	.7273	2.00
OVERSAT	24	0	22.1250	22.5000	23.00	4.0573	16.4620	16.00
QOFCARE	24	0	20.2083	20.5000	22.00	3.4260	11.7373	14.00
TIMECLIN	24	0	10.8750	12.0000	12.00	2.4727	6.1141	9.00
SUPSTAFF	24	0	10.1250	10.0000	10.00[a]	3.0548	9.3315	12.00
REWARD	24	0	7.2917	7.0000	6.00	1.8528	3.4330	6.00
TIMEPERS	24	0	4.3750	4.0000	3.00[a]	2.4283	5.8967	9.00
TOTAUTON	24	0	118.7917	118.0000	100.00[a]	11.7694	138.5199	44.00
PCOLAB	24	0	69.9167	73.0000	80.00[a]	16.0703	258.2536	56.00

a. Multiple modes exist. The smallest value is shown

Table 3.-- Descriptive statistics on intent to remain in AMEDD, overall satisfaction, quality of care, clinical time, support staff, rewards, personal time, total autonomy, and total collaboration scores - (combined category of nurse practitioner, clinical nurse specialist, and certified nurse midwife

Statistics

	N							
	Valid	Missing	Mean	Median	Mode	Std. Deviation	Variance	Range
TITLE APN Title	37	0	1.5405	1.0000	1.00	1.1449	1.3108	3.00
STAY intention to stay in MHSS	32	5	3.5625	4.0000	5.00	1.4797	2.1895	4.00
OVERSAT	37	0	20.6216	22.0000	23.00[a]	4.7805	22.8529	18.00
QOFCARE	37	0	19.8649	20.0000	18.00	3.5132	12.3423	18.00
TIMECLIN	37	0	9.6757	10.0000	7.00	2.7086	7.3363	12.00
SUPSTAFF	37	0	9.4324	9.0000	9.00	2.8239	7.9745	12.00
REWARD	37	0	6.3243	7.0000	8.00	2.4043	5.7808	8.00
TIMEPERS	37	0	4.6216	4.0000	4.00	2.1128	4.4640	8.00
TOTAUTON	37	0	121.6757	122.0000	135.00	12.2430	149.8919	53.00
PCOLAB	37	0	79.0811	80.0000	98.00	15.1463	229.4099	60.00

a. Multiple modes exist. The smallest value is shown

Table 4. Correlations: certified registered nurse anesthetists - analysis of the relationship between quality of professional life factors (quality of care, clinical time, support staff, personal time, and rewards) and intent to remain in the AMEDD

		QOFCARE	TIMECLIN	SUPSTAFF	REWARD	TIMEPERS	STAY intention to stay in MHSS
Pearson Correlation	QOFCARE	1.000	.438*	.438*	.337	.490*	-.338
	TIMECLIN	.438*	1.000	-.041	.055	.350	-.003
	SUPSTAFF	.438*	-.041	1.000	.631**	.364	-.003
	REWARD	.337	.055	.631**	1.000	.242	-.066
	TIMEPERS	.490*	.350	.364	.242	1.000	-.043
	STAY intention to stay in MHSS	-.338	-.003	-.003	-.066	-.043	1.000
Sig. (2-tailed)	QOFCARE	.	.037	.037	.116	.018	.134
	TIMECLIN	.037	.	.851	.805	.102	.990
	SUPSTAFF	.037	.851	.	.001	.088	.989
	REWARD	.116	.805	.001	.	.266	.775
	TIMEPERS	.018	.102	.088	.266	.	.853
	STAY intention to stay in MHSS	.134	.990	.989	.775	.853	.
N	QOFCARE	23	23	23	23	23	21
	TIMECLIN	23	23	23	23	23	21
	SUPSTAFF	23	23	23	23	23	21
	REWARD	23	23	23	23	23	21
	TIMEPERS	23	23	23	23	23	21
	STAY intention to stay in MHSS	21	21	21	21	21	21

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Table 5.-- Correlations: community health nurses - analysis of the relationship between quality of professional life factors (quality of care, clinical time, support staff, rewards, and personal time) and intent to remain in the AMEDD

		STAY intention to stay in MHSS	QOFCARE	TIMECLIN	SUPSTAFF	REWARD	TIMEPERS
Pearson Correlation	STAY intention to stay in MHSS	1.000	.336	.169	.310	.621**	.000
	QOFCARE	.336	1.000	.537**	.330	.127	.576**
	TIMECLIN	.169	.537**	1.000	.250	.179	.385
	SUPSTAFF	.310	.330	.250	1.000	.516**	-.036
	REWARD	.621**	.127	.179	.516**	1.000	.042
	TIMEPERS	.000	.576**	.385	-.036	.042	1.000
Sig. (2-tailed)	STAY intention to stay in MHSS	.	.117	.440	.150	.002	1.000
	QOFCARE	.117	.	.007	.116	.554	.003
	TIMECLIN	.440	.007	.	.239	.402	.063
	SUPSTAFF	.150	.116	.239	.	.010	.868
	REWARD	.002	.554	.402	.010	.	.844
	TIMEPERS	1.000	.003	.063	.868	.844	.
N	STAY intention to stay in MHSS	23	23	23	23	23	23
	QOFCARE	23	24	24	24	24	24
	TIMECLIN	23	24	24	24	24	24
	SUPSTAFF	23	24	24	24	24	24
	REWARD	23	24	24	24	24	24
	TIMEPERS	23	24	24	24	24	24

**. Correlation is significant at the 0.01 level (2-tailed).

Table 6.-- Correlations: combined APN category of nurse practitioner, clinical nurse specialist, certifeid nurse midwife - analysis of the relationship between quality of professional life factors (quality of care, clinical time, support staff, personal time, and rewards) and intent to remain in the AMEDD.

		STAY intention to stay in MHSS	QOFCARE	TIMECLIN	SUPSTAFF	REWARD	TIMEPERS
Pearson Correlation	STAY intention to stay in MHSS	1.000	.297	.332	.255	.542**	.252
	QOFCARE	.297	1.000	.468**	.524**	.449**	.262
	TIMECLIN	.332	.468**	1.000	.219	.341*	.357*
	SUPSTAFF	.255	.524**	.219	1.000	.290	.345*
	REWARD	.542**	.449**	.341*	.290	1.000	.227
	TIMEPERS	.252	.262	.357*	.345*	.227	1.000
Sig. (2-tailed)	STAY intention to stay in MHSS	.	.099	.063	.159	.001	.164
	QOFCARE	.099	.	.003	.001	.005	.117
	TIMECLIN	.063	.003	.	.194	.039	.030
	SUPSTAFF	.159	.001	.194	.	.082	.037
	REWARD	.001	.005	.039	.082	.	.176
	TIMEPERS	.164	.117	.030	.037	.176	.
N	STAY intention to stay in MHSS	32	32	32	32	32	32
	QOFCARE	32	37	37	37	37	37
	TIMECLIN	32	37	37	37	37	37
	SUPSTAFF	32	37	37	37	37	37
	REWARD	32	37	37	37	37	37
	TIMEPERS	32	37	37	37	37	37

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table 7. Correlations: certified registered nurse anesthetists - analysis of the relationship between quality of professional life factors (quality of care, clinical time, support staff, rewards, personal time) and overall satisfaction

		QOFCARE	TIMECLIN	SUPSTAFF	REWARD	TIMEPERS	OVERSAT
Pearson Correlation	QOFCARE	1.000	.438*	.438*	.337	.490*	.439*
	TIMECLIN	.438*	1.000	-.041	.055	.350	-.140
	SUPSTAFF	.438*	-.041	1.000	.631**	.364	.497*
	REWARD	.337	.055	.631**	1.000	.242	.063
	TIMEPERS	.490*	.350	.364	.242	1.000	.059
	OVERSAT	.439*	-.140	.497*	.063	.059	1.000
Sig. (2-tailed)	QOFCARE	.	.037	.037	.116	.018	.036
	TIMECLIN	.037	.	.851	.805	.102	.524
	SUPSTAFF	.037	.851	.	.001	.088	.016
	REWARD	.116	.805	.001	.	.266	.774
	TIMEPERS	.018	.102	.088	.266	.	.790
	OVERSAT	.036	.524	.016	.774	.790	.
N	QOFCARE	23	23	23	23	23	23
	TIMECLIN	23	23	23	23	23	23
	SUPSTAFF	23	23	23	23	23	23
	REWARD	23	23	23	23	23	23
	TIMEPERS	23	23	23	23	23	23
	OVERSAT	23	23	23	23	23	23

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Table 8.-- Correlations: community health nurses - analysis of the relationship between quality of professional life factors (quality of care, clinical time, support staff, rewards, personal time) and overall satisfaction

		QOFCARE	TIMECLIN	SUPSTAFF	REWARD	TIMEPERS	OVERSAT
Pearson Correlation	QOFCARE	1.000	.537**	.330	.127	.576**	.777**
	TIMECLIN	.537**	1.000	.250	.179	.385	.470*
	SUPSTAFF	.330	.250	1.000	.516**	-.036	.511*
	REWARD	.127	.179	.516**	1.000	.042	.307
	TIMEPERS	.576**	.385	-.036	.042	1.000	.379
	OVERSAT	.777**	.470*	.511*	.307	.379	1.000
Sig. (2-tailed)	QOFCARE	.	.007	.116	.554	.003	.000
	TIMECLIN	.007	.	.239	.402	.063	.021
	SUPSTAFF	.116	.239	.	.010	.868	.011
	REWARD	.554	.402	.010	.	.844	.144
	TIMEPERS	.003	.063	.868	.844	.	.068
	OVERSAT	.000	.021	.011	.144	.068	.
N	QOFCARE	24	24	24	24	24	24
	TIMECLIN	24	24	24	24	24	24
	SUPSTAFF	24	24	24	24	24	24
	REWARD	24	24	24	24	24	24
	TIMEPERS	24	24	24	24	24	24
	OVERSAT	24	24	24	24	24	24

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table 9.--Correlations: analysis of the relationship between quality of professional life factors (quality of care, clinical time, support staff, rewards, personal time) and overall satisfaction-(combined APN category of nurse practitioners, clinical nurse specialists, and certified nurse midwives)

Correlations

		QOFCARE	TIMECLIN	SUPSTAFF	REWARD	TIMEPERS	OVERSAT
Pearson Correlation	QOFCARE	1.000	.468**	.524**	.449**	.262	.660**
	TIMECLIN	.468**	1.000	.219	.341*	.357*	.323
	SUPSTAFF	.524**	.219	1.000	.290	.345*	.578**
	REWARD	.449**	.341*	.290	1.000	.227	.441**
	TIMEPERS	.262	.357*	.345*	.227	1.000	.263
	OVERSAT	.660**	.323	.578**	.441**	.263	1.000
Sig. (2-tailed)	QOFCARE	.	.003	.001	.005	.117	.000
	TIMECLIN	.003	.	.194	.039	.030	.051
	SUPSTAFF	.001	.194	.	.082	.037	.000
	REWARD	.005	.039	.082	.	.176	.006
	TIMEPERS	.117	.030	.037	.176	.	.115
	OVERSAT	.000	.051	.000	.006	.115	.
N	QOFCARE	37	37	37	37	37	37
	TIMECLIN	37	37	37	37	37	37
	SUPSTAFF	37	37	37	37	37	37
	REWARD	37	37	37	37	37	37
	TIMEPERS	37	37	37	37	37	37
	OVERSAT	37	37	37	37	37	37

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table 10.-- Correlations: certified registered nurse anesthetists - analysis of the relationship between APNs' perceptions of autonomy, collaboration, and overall satisfaction

		TOTAUTON	PCOLAB	OVERSAT
Pearson Correlation	TOTAUTON	1.000	.498*	.549**
	PCOLAB	.498*	1.000	.398
	OVERSAT	.549**	.398	1.000
Sig. (2-tailed)	TOTAUTON	.	.016	.007
	PCOLAB	.016	.	.060
	OVERSAT	.007	.060	.
N	TOTAUTON	23	23	23
	PCOLAB	23	23	23
	OVERSAT	23	23	23

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Table 11.-- Correlations: community health nurses - analysis of the relationship between APNs' perceptions of autonomy, collaboration, and overall satisfaction

		TOTAUTON	PCOLAB	OVERSAT
Pearson Correlation	TOTAUTON	1.000	.243	.643**
	PCOLAB	.243	1.000	.484*
	OVERSAT	.643**	.484*	1.000
Sig. (2-tailed)	TOTAUTON	.	.253	.001
	PCOLAB	.253	.	.017
	OVERSAT	.001	.017	.
N	TOTAUTON	24	24	24
	PCOLAB	24	24	24
	OVERSAT	24	24	24

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table 12.-- Correlations: analysis of the relationship between APNs' perceptions of autonomy, collaboration, and overall satisfaction- (combined APN category of nurse practitioners, clinical nurse specialists, and certified nurse midwives)

Correlations

		TOTAUTON	PCOLAB	OVERSAT
Pearson Correlation	TOTAUTON	1.000	.182	.435**
	PCOLAB	.182	1.000	.367*
	OVERSAT	.435**	.367*	1.000
Sig. (2-tailed)	TOTAUTON	.	.280	.007
	PCOLAB	.280	.	.025
	OVERSAT	.007	.025	.
N	TOTAUTON	37	37	37
	PCOLAB	37	37	37
	OVERSAT	37	37	37

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table 13.-- Correlations: certified registered nurse anesthetists - analysis of the relationship between APNs' perceptions of autonomy, collaboration, and intent to remain in the AMEDD

		TOTAUTON	PCOLAB	OVERSAT	STAY intention to stay in MHSS
Pearson Correlation	TOTAUTON	1.000	.498*	.549**	.282
	PCOLAB	.498*	1.000	.398	.088
	OVERSAT	.549**	.398	1.000	.166
	STAY intention to stay in MHSS	.282	.088	.166	1.000
Sig. (2-tailed)	TOTAUTON	.	.016	.007	.216
	PCOLAB	.016	.	.060	.705
	OVERSAT	.007	.060	.	.473
	STAY intention to stay in MHSS	.216	.705	.473	.
N	TOTAUTON	23	23	23	21
	PCOLAB	23	23	23	21
	OVERSAT	23	23	23	21
	STAY intention to stay in MHSS	21	21	21	21

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Table 14.-- Correlations: community health nurses - analysis of the relationship between APNs' perceptions of autonomy, collaboration, and intent to remain in the AMEDD

		TOTAUTON	PCOLAB	OVERSAT	STAY intention to stay in MHSS
Pearson Correlation	TOTAUTON	1.000	.243	.643**	.347
	PCOLAB	.243	1.000	.484*	-.053
	OVERSAT	.643**	.484*	1.000	.478*
	STAY intention to stay in MHSS	.347	-.053	.478*	1.000
Sig. (2-tailed)	TOTAUTON	.	.253	.001	.105
	PCOLAB	.253	.	.017	.809
	OVERSAT	.001	.017	.	.021
	STAY intention to stay in MHSS	.105	.809	.021	.
N	TOTAUTON	24	24	24	23
	PCOLAB	24	24	24	23
	OVERSAT	24	24	24	23
	STAY intention to stay in MHSS	23	23	23	23

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table 15.-- Correlations: analysis of the relationship between APNs' perceptions of autonomy, opportunities for collaboration, overall satisfaction, and intent to remain in the AMEDD-(combined APN category of nurse practitioner, clinical nurse specialist, and certified nurse midwife)

Correlations

		TOTAUTON	PCOLAB	OVERSAT	STAY intention to stay in MHSS
Pearson Correlation	TOTAUTON	1.000	.182	.435**	.128
	PCOLAB	.182	1.000	.367*	-.176
	OVERSAT	.435**	.367*	1.000	.219
	STAY intention to stay in MHSS	.128	-.176	.219	1.000
Sig. (2-tailed)	TOTAUTON	.	.280	.007	.485
	PCOLAB	.280	.	.025	.335
	OVERSAT	.007	.025	.	.228
	STAY intention to stay in MHSS	.485	.335	.228	.
N	TOTAUTON	37	37	37	32
	PCOLAB	37	37	37	32
	OVERSAT	37	37	37	32
	STAY intention to stay in MHSS	32	32	32	32

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Hypothesis 1: There is no relationship between quality of professional life factors (rewards, quality of care, clinical time, support staff, and personal time) and intent to remain in the AMEDD - (certified registered nurse anesthetists (CRNAs)

Table 16a.-- Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.418[a]	.174	-.101	1.0811

a. Predictors: (Constant), TIMEPERS, REWARD, TIMECLIN, QOFCARE, SUPSTAFF

Table 16b.-- ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.705	5	.741	.634	.677[a]
	Residual	17.533	15	1.169		
	Total	21.238	20			

a. Predictors: (Constant), TIMEPERS, REWARD, TIMECLIN, QOFCARE, SUPSTAFF

b. Dependent Variable: STAY intention to stay in MHSS

Table 16c.-- Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.779	2.345		2.039	.060
	QOFCARE	-.156	.090	-.511	-1.732	.104
	TIMECLIN	8.712E-02	.115	.206	.754	.462
	SUPSTAFF	.182	.233	.253	.778	.449
	REWARD	-4.39E-02	.160	-.080	-.275	.787
	TIMEPERS	3.084E-02	.159	.051	.193	.849

a. Dependent Variable: STAY intention to stay in MHSS

Hypothesis 1: There is no relationship between quality of professional life factors (rewards, quality of care, clinical time, support staff, and personal time) and intent to remain in the AMEDD - (community health nurses)

Table 17a.-- Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.621[a]	.386	.356	.6841

a. Predictors: (Constant), REWARD

Table 17b.-- ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.171	1	6.171	13.184	.002[a]
	Residual	9.829	21	.468		
	Total	16.000	22			

a. Predictors: (Constant), REWARD

b. Dependent Variable: STAY intention to stay in MHSS

Table 17c.-- Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.963	.579		3.392	.003
	REWARD	.280	.077	.621	3.631	.002

a. Dependent Variable: STAY intention to stay in MHSS

Hypothesis 1: There is no relationship between quality of professional life factors (rewards, quality of care, clinical time, support staff, and personal time) and intent to remain in the AMEDD - (combined category of nurse practitioners, clinical nurse specialists, and certified nurse midwives)

Table 18a.--Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.542[a]	.293	.270	1.2644

a. Predictors: (Constant), REWARD

Table 18b.--ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	19.910	1	19.910	12.453	.001[a]
	Residual	47.965	30	1.599		
	Total	67.875	31			

a. Predictors: (Constant), REWARD

b. Dependent Variable: STAY intention to stay in MHSS

Table 18c.--Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.560	.610		2.557	.016
	REWARD	.313	.089	.542	3.529	.001

a. Dependent Variable: STAY intention to stay in MHSS

Hypothesis 2: There is no relationship between quality of professional life factors (rewards, quality of care, clinical time, personal time, and support staff) and overall satisfaction - (certified registered nurse anesthetists)

Table 19a.-- Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.497[a]	.247	.211	2.4638

a. Predictors: (Constant), SUPSTAFF

Table 19b.-- ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	41.831	1	41.831	6.891	.016[a]
	Residual	127.473	21	6.070		
	Total	169.304	22			

a. Predictors: (Constant), SUPSTAFF

b. Dependent Variable: OVERSAT

Table 19c.-- Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	13.216	3.828		3.453	.002
	SUPSTAFF	.939	.358	.497	2.625	.016

a. Dependent Variable: OVERSAT

Hypothesis 2: There is no relationship between quality of professional life factors (rewards, quality of care, clinical time, personal time, and support staff) and overall satisfaction - (community health nurses)

Table 20a.-- Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.777[a]	.604	.586	2.6121
2	.822[b]	.676	.645	2.4158

a. Predictors: (Constant), QOFCARE

b. Predictors: (Constant), QOFCARE, SUPSTAFF

Table 20b.-- ANOVA[c]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	228.517	1	228.517	33.492	.000[a]
	Residual	150.108	22	6.823		
	Total	378.625	23			
2	Regression	256.069	2	128.034	21.939	.000[b]
	Residual	122.556	21	5.836		
	Total	378.625	23			

a. Predictors: (Constant), QOFCARE

b. Predictors: (Constant), QOFCARE, SUPSTAFF

c. Dependent Variable: OVERSAT

Table 20c.-- Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.532	3.257		1.085	.290
	QOFCARE	.920	.159	.777	5.787	.000
2	(Constant)	1.945	3.099		.627	.537
	QOFCARE	.808	.156	.683	5.191	.000
	SUPSTAFF	.380	.175	.286	2.173	.041

a. Dependent Variable: OVERSAT

Hypothesis 2: There is no relationship between quality of professional life factors (rewards, quality of care, clinical time, personal time, and support staff) and overall satisfaction - (combined APN category of nurse practitioners, clinical nurse specialists, and certified nurse midwives)

Table 21a.--Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.660[a]	.436	.420	3.6419
2	.714[b]	.510	.481	3.4426

a. Predictors: (Constant), QOFCARE

b. Predictors: (Constant), QOFCARE, SUPSTAFF

Table 21b.--ANOVA[c]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	358.493	1	358.493	27.029	.000[a]
	Residual	464.209	35	13.263		
	Total	822.703	36			
2	Regression	419.744	2	209.872	17.708	.000[b]
	Residual	402.959	34	11.852		
	Total	822.703	36			

a. Predictors: (Constant), QOFCARE

b. Predictors: (Constant), QOFCARE, SUPSTAFF

c. Dependent Variable: OVERSAT

Table 21c.--Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.778	3.484		.797	.431
	QOFCARE	.898	.173	.660	5.199	.000
2	(Constant)	2.201	3.303		.666	.510
	QOFCARE	.670	.192	.492	3.493	.001
	SUPSTAFF	.542	.239	.320	2.273	.029

a. Dependent Variable: OVERSAT

Hypothesis 3: There is no relationship between APNs' perceptions of autonomy, opportunities for collaboration, and overall satisfaction -(certified registered nurse anesthetists)

Table 22a.-- Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.549[a]	.301	.268	2.3733

a. Predictors: (Constant), TOTAUTON

Table 22b.-- ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	51.018	1	51.018	9.058	.007[a]
	Residual	118.286	21	5.633		
	Total	169.304	22			

a. Predictors: (Constant), TOTAUTON

b. Dependent Variable: OVERSAT

Table 22c.-- Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.627	6.182		.748	.462
	TOTAUTON	.151	.050	.549	3.010	.007

a. Dependent Variable: OVERSAT

Hypothesis 3: There is no relationship between APNs' perceptions of autonomy, opportunities for collaboration, and overall satisfaction - (community health nurses)

Table 23a.-- Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.643[a]	.414	.387	3.1759
2	.727[b]	.528	.483	2.9178

a. Predictors: (Constant), TOTAUTON

b. Predictors: (Constant), TOTAUTON, PCOLAB

Table 23b.-- ANOVA[c]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	156.725	1	156.725	15.538	.001[a]
	Residual	221.900	22	10.086		
	Total	378.625	23			
2	Regression	199.840	2	99.920	11.737	.000[b]
	Residual	178.785	21	8.514		
	Total	378.625	23			

a. Predictors: (Constant), TOTAUTON

b. Predictors: (Constant), TOTAUTON, PCOLAB

c. Dependent Variable: OVERSAT

Table 23c.-- Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-4.222	6.715		-.629	.536
	TOTAUTON	.222	.056	.643	3.942	.001
2	(Constant)	-6.903	6.284		-1.099	.284
	TOTAUTON	.193	.053	.559	3.615	.002
	PCOLAB	8.783E-02	.039	.348	2.250	.035

a. Dependent Variable: OVERSAT

Hypothesis 3: There is no relationship between APNs' perceptions of autonomy, opportunities for collaboration, and overall satisfaction - (combined APN category of nurse practitioners, clinical nurse specialists, and certified nurse midwives)

Table 24a.--Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.435[a]	.189	.166	4.3656

a. Predictors: (Constant), TOTAUTON

Table 24b.--ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	155.649	1	155.649	8.167	.007[a]
	Residual	667.054	35	19.059		
	Total	822.703	36			

a. Predictors: (Constant), TOTAUTON

b. Dependent Variable: OVERSAT

Table 24c.--Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-4.34E-02	7.267		-.006	.995
	TOTAUTON	.170	.059	.435	2.858	.007

a. Dependent Variable: OVERSAT

Hypothesis 4: There is no relationship between APNs' perceptions of autonomy, opportunities for collaboration, and overall satisfaction, and intent to remain in the AMEDD- (certified registered nurse anesthetists)

Table 25a.-- Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.288[a]	.083	-.079	1.0704

a. Predictors: (Constant), OVERSAT, PCOLAB, TOTAUTON

Table 25b.-- ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.760	3	.587	.512	.679[a]
	Residual	19.478	17	1.146		
	Total	21.238	20			

a. Predictors: (Constant), OVERSAT, PCOLAB, TOTAUTON

b. Dependent Variable: STAY intention to stay in MHSS

Table 25c.-- Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.741	2.860		.259	.799
	TOTAUTON	2.936E-02	.029	.297	1.008	.328
	PCOLAB	-5.03E-03	.020	-.067	-.250	.806
	OVERSAT	1.125E-02	.101	.031	.111	.913

a. Dependent Variable: STAY intention to stay in MHSS

Hypothesis 4: There is no relationship between APNs' perceptions of autonomy, opportunities for collaboration, and overall satisfaction, and intent to remain in the AMEDD - (community health nurses)

Table 26a.-- Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.478[a]	.228	.191	.7668

a. Predictors: (Constant), OVERSAT

Table 26b.-- ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.651	1	3.651	6.209	.021[a]
	Residual	12.349	21	.588		
	Total	16.000	22			

a. Predictors: (Constant), OVERSAT

b. Dependent Variable: STAY intention to stay in MHSS

Table 26c.-- Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.825	.887		2.056	.052
	OVERSAT	9.868E-02	.040	.478	2.492	.021

a. Dependent Variable: STAY intention to stay in MHSS

Hypothesis 4: There is no relationship between APNs' perceptions of autonomy, opportunities for collaboration, and overall satisfaction, and intent to remain in the AMEDD - (combined APN category of nurse practitioner, clinical nurse specialist, and certified nurse midwife)

Table 27a.-- Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.365[a]	.133	.041	1.4494

a. Predictors: (Constant), OVERSAT, PCOLAB, TOTAUTON

Table 27b.-- ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9.052	3	3.017	1.436	.253[a]
	Residual	58.823	28	2.101		
	Total	67.875	31			

a. Predictors: (Constant), OVERSAT, PCOLAB, TOTAUTON

b. Dependent Variable: STAY intention to stay in MHSS

Table 27c.-- Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.795	2.893		1.312	.200
	TOTAUTON	-5.43E-04	.025	-.004	-.021	.983
	PCOLAB	-3.04E-02	.018	-.321	-1.657	.109
	OVERSAT	.108	.068	.354	1.584	.125

a. Dependent Variable: STAY intention to stay in MHSS

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A $4.99 cost dispensing each unclaimed prescription resulted in $4,291 of wasted resources; $62,654 if projected for the year.

Educating providers and patients and stressing provider/patient communication and interaction are keys to improving compliance. The pharmacy should implement a Discharge Medication Program that delivers prescriptions to the ward prior to a ptaient's discharge. Also, implementing a patient call system could potentially lower the noncompliance rate at Darnall from 4.72% to 2.88%.

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